The

Brazilian Bulletin.

Organ of Mackenzie College.

Vedes a grande terra que continua Vai de Callisto ao seu contrario polo Da Sancta Cruz o nome lhe poreis. (Lusiads, X. 139-40.)

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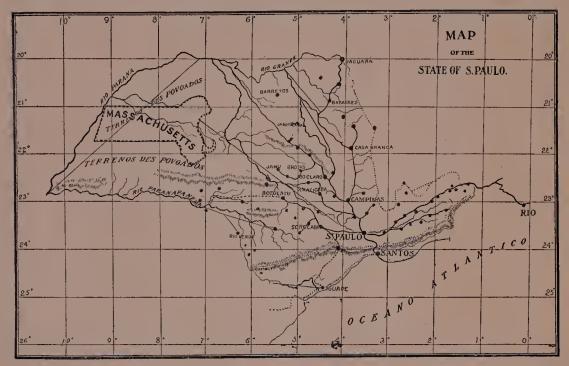
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THE STATE OF S. PAULO.

This State, in the central-southern part of Brazil, is part of the vast territory donated by the King of Portugal to Martin Affonao de Souza, and by him occupied in 1530. No less than seven of the twenty states of Brazil have been formed out of the original grant. The present State of S. Paulo contains 290,876 sq. kilometers, and has a population of 1,970,000, 800,000 of whom are foreigners. In wealth, enterprise and commerce it is the first of the Republics. It possesses one-third of the railways of the country and receives the largest share of emigration. Its relative size may be seen by the outline of Massachusetts, on the same scale, in the western corner of the state.

Its capital city, S. Paulo, was founded by the Jesuits on St. Paul's day, Jan. 25, 1554, hence the name of the city and state.

It is situated on the first table-land, above the coast range of mountains, 45 miles from the port of Santos, with which it is connected by rail, at an elevation of 2,493 feet. It is just within the Tropics, and has a population of nearly 200,000, and is the most rapidly growing city of Brazil. More than 1,600 buildings were erected in it in 1897.



The whole State, except a narrow strip along the coast, occupies an elevated plateau, well-watered and well-timbered, having a large area of the rich red lands suitable for coffee, sugar, corn, beans, etc., as well as extensive range for cattle in the West and Northwest.

In 1887, while it still had slave labor, it produced 1,800,000 bags of coffee; slavery was abolished without disturbance and with an increase of production. The coffee crop of 1896 was 5,104,000 bags, while that of 1897 was 5,919,954 more than half the entire output of the country. No other country, with a population of less than two million has attained such a degree of prosperity in so short a time.

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JUNE, 1898.

No. 1.

The purpose of the Bulletin is to call attention to Brazil and her people and to awaken interest in a system of American education, on a Christian foundation, now being attempted, in a modest way, at S. Paulo,—to show the value and the real need as opposed to that old system of religious education which, after more than three centuries, has produced over 80 per cent. of illiteracy, which is everywhere and always opposed to free institutions; and to be distinguished from that new system which ignores all religion and advocates education on purely utilitarian ground, simply elaborating raw brain material into a more marketable product. It will aim to represent that better system which takes the whole individual into account, training head, heart and conscience for the development of Character—Christian character; believing, as we do, that the safety of free institutions depends upon the formation of such character no less in the mass of the people than among its leaders, and that the Holy Scriptures, as the groundwork of education, furnish the only ethical basis on which to safely organize society.

Frankly optimistic in Brazilian affairs, it will aim, as far as its influence reaches, to introduce "Greater Brazil" to its readers,—the "New Brazil" just emerging from the bondage of a State church and Bourbon rule, which, however liberal in form it may have been and however amiable and learned its chief, was based upon wrong principles, and under which Brazil was doomed to remain in the rearrank of the nations; now set free, emancipated, she aspires to a place in the front rank.

To the general American public Brazil is a *terra incognita*. Less is known of it than of Asia, Africa, the distant islands of the sea, or even the North Pole. Very few books of travel, along special lines, some of them valuable and interesting as partial studies, have been published in recent years, but no comprehensive work has been brought out since "Brazil and Brazilians," by Kidder and Fletcher, published more than thirty years ago.

The attitude of Brazil towards us is most friendly and sympathetic. She has paid us the compliment of adopting our form of government and system of laws. Our attitude towards her has been one of *quasi* indifference, based upon ignorance,—a cold commercialism related to coffee and rubber, which we need in our business. Are there no higher ethical and religious grounds? As the elder brother, have we nothing to answer for? Do great privileges carry no corresponding responsibilities?

Whether we will or no, Brazil is sure to be a ruling influence in South American affairs, in the not very distant future, and if she fail to become the great Conservative power, it may be because we withhold our sympathy and support during the critical formative period of her life.

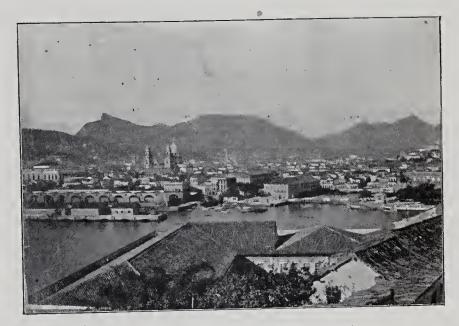
We have no journalistic ambition and no intention of aspiring to a place among the literary magazines of the day. The Bulletin will simply aim, in its limited sphere, to advocate the paramount claims of Christian education for Brazil and at the same time contribute such information and views concerning the "New Brazil" as come legitimately within the scope and opportunities of college and school and is warranted by an experience of more than forty years in the country —without carping criticism or unfriendly aspersions.

On behalf of the Faculty.

BRAZILIAN AFFAIRS.

A dynasty may be overthrown in a day and a new form of government be adopted; new theories of political and social life may be accepted and laws formulated to put them into practice; new rules of procedure and new standards of citizenship set up; but old prejudices and habits, old motives and standards will, nevertheless, prevail for a generation. A new generation must be educated in the *new principles* of government before the new formulae can be reduced to practice.

¹ Brazil has served a short but severe apprenticeship in self-government. During the less than a decade of its independence, revolution has followed revolution with vertiginous rapidity. Blood and treasure have been spent in apparently useless sacrifice. Blunders have been committed in finances, in politics and in essentials of good government, with no apparent error of form. The staunchest Republicans of the "old guard" have lost their heads and have out-heroded Herod in bureaucratic



View of the Docks and Arsenal, Rio de Janeiro.

methods, burdening civil service with a dead weight of political favoritism,—but, with all this they have not quite reached the measure of folly and misgovernment that characterised the early days of our independence when we were "drifting towards anarchy," and our currency had lost its purchasing power.

Brazil, under less favorable conditions, has done better than we, and the era of captious revolution, internal discord and petty conspiracy seems to have culminated in the attempted assassination of the President last November, resulting in the death of brave Gen. Bittencourt. The shock opened the eyes of the people, and the inherent good sense and patriotism of the nation was awakened; a strong reaction set in against revolutions and the demagogues who incited them, and Brazil is now apparently entering upon a new phase of life as quiet and peaceful as it was before agitated and bellicose.

The recent peaceful election of a President was an agreeable surprise; not as to the result, for that was a foregone conclusion; but because of its quiet one-sidedness. It was feared that there would be a sharp contest at the polls, and

perhaps grave disturbances. The old Republican party had split, two parties had been formed and two tickets put before the public. So many of the leaders of the new party, however, were accused of complicity in the attempted murder of the President, whether justly or not has not been proven, that it went to pieces before the election and the candidate of the old wing of the party was elected with little opposition. Nearly 400,000 votes were cast for Campos Salles against less than 20,000 for his opponent. This is a much larger vote than was cast at the previous election, but is too small for a nation of 18,000,000. Such elections settle no questions of principle or policy, but, in this case, it insures another *quatrenio* of the honest, patriotic government inaugurated by the present incumbent. For this we are grateful.

The new President, who will take his seat next November, is no tyro in public affairs, having been Minister of Justice in the first Republican government and author of its most sweeping reforms. He has served in the Federal Senate and was recently Governor of the state of S. Paulo. He was one of the founders of the Republican party in the time of the Empire, and is a lawyer of acknowledged ability and an upright man. He is a sincere admirer of American institutions, and was largely instrumental in their adoption in Brazil. Born in 1841 of a wealthy family of planters, himself a prominent coffee planter, he is in the prime of life, blessed with vigorous health and great capacity for work, and will enter upon the duties of his high office under far more favorable auspices than did his predecessor.

Prudente de Moraes Barros, the first civilian President of Brazil, deserves well of his country and of history. He found the country torn with civil war and factional strife. He has brought it through the most difficult period of its life and leaves it at peace. Every step has been *forward*. If he has not restored the financial equilibrium, he has taken a long step in the right direction by rigid economy and retrenchment. The office sought him, not he the office. He accepted it from a sense of duty and under the pressure of shattered health, which obliged him to undergo a serious surgical operation during his term of office, but with an iron constitution and great courage he has held on, so far, unflinchingly.

Unless all signs fail, Brazil is now entering upon a new era of peaceful develop-We cannot, however, disguise the fact that she is seriously embarassed ment. in her finances. The causes are not difficult to find. The bungling of doctrinaries, into whose hands the finances of the country fell during the first years of the Republic, and who flooded the country with an irredeemable paper currency, now depreciated from a par of 27 pence to less than 6 pence. (This is the chief cause.) The mania for native industries and the wild speculation it induced, locking up permanently large amounts of capital in unproductive enterprises, resulting in the production of a few manufactured articles that could be imported much cheaper, and in the importation of many staple articles that could be produced at home more cheaply. The giving to the States sources of revenue that legitimately belonged to the Federal Government, without relieving it of the burdens which belonged to the States, producing the anomaly of prosperous States and an embarassed general government. A foreign debt, bearing interest in gold, which, though not large in itself, at the present low exchange value of the paper money, consumes forty-four per cent. of the gross income. The falling off of more than forty per cent. of the value of coffee, thereby disturbing the balance of trade. In these, and in other minor evils are to be found the causes of the present financial crisis.

It is only just to the Republic to state that most of the bonded indebtedness of the country was inherited from the Empire. In 1827 the foreign debt was only $\pounds_{2,054,463}$. In 1889 the Republic found it $\pounds_{30,415,698}$. The first issue of internal bonds took place in 1827, amounting to 13,497,000 *mil-reis*, at a par value of 48 pence to the *mil-reis*; from that date to 1889 there had been 45 issues of bonds payable in currency, and 4 in gold; not all of uniform value, however, as in 1847, exchange having been for a long time below 27 d, with little tendency to improve, 27 d was made *par* by Imperial decree, thus creating what has since been known as the *weak*, or Brazilian, and the *strong*, or Portuguese *mil-reis*. Most of the product of these loans, at home and abrond, was spent to meet annual deficits arising from civil and foreign wars (the Paraguayan chiefly), to provide dowers for princes and princesses (1), to keep up the Imperial establishment and to satisfy Portugal's unjust indemnity claims. A very small part was applied to public works.

The amount of paper money in circulation is 712,355,393 mil-reis (3).

With a population of eighteen millions, this is not an alarming list of liabilities; the *per capita* debt being only half that of Great Britain, not quite double that of the United States, and much less than that of any other South American country.

Brazil has an honorable record of seventy years of prompt payment, which ought to create a presumption of continuance, or at least, of honest intentions. The April coupons were promptly met, though at a great sacrifice, and £270,000was applied to amortisation. The government has declared that it is in funds for all of this years' payments abroad; yet it is from the foreign market (London) that pessimistic views and alarming prophecies come. The curious part of it is that a prediction of a fall in exchange is followed by a *fall*, without any change in the conditions of the country, making it look wonderfully like a conspiracy, if such a thing were possible.

We do not believe there will be a suspension of payment of interest on the foreign bonds, and should deplore such an occurance; but, at the same time, it would not be an unmixed evil. A reasonable *moratorium* might be gracefully proposed by the creditors, which would enable the government to realize on its immense resources, as yet untouched, devise means to redeem its currency, and, perhaps, fix a new *par* of exchange, without any sudden disturbance of economic relations (4).

While these questions of commerce and finance have an important bearing upon the well-being of a nation, they are not the most important ones or those that give the most concern to patriotic and thinking Brazilians. They seem complex, but are in reality very simple. With nations as with individuals, if expenses exceed income, one must be cut down or the other augmented, or both measures be resorted to. The great problem that confronts Brazil to-day, is how to bring a free people up to the level of their new-found freedom in the least time and with the least friction. Demagogues fatten on the ignorance of the people, the people must therefore be educated. The sure cure of the kind of revolutions that have afflicted Brazil is the education of the masses.

Much has been written about the decline of the Latin races, as if certain nations were doomed because of their ancestors. It would be a monstrous thing, from a Christian standpoint, if a nation or an individual *must* fall behind in the race of life under the *fatal* influence of the blood in their veins. We do not believe it, but agree with Emil de Laveyle, who wrote on the subject some twenty-five years ago, that it is rather a question of religion than of race. Centuries of wrong thinking—acting from wrong motives—the effects of vicious education or no education, will make the people of any race weak; but there is

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in an education based upon the principles of a *pure* Christianity that, will make the people of any race strong; the power of Truth in God's Word, on the intellects and hearts of men will regenerate a nation as surely as it will an individual, purify its politics and straighten out its finances.

The money question will settle itself, the resources of the country are abundant, and only require honest, prudent management. Brazil practically monopolizes two great staples of the world—coffee and rubber—and has many other sources of production not yet touched.

The real question is what is to be done with the eighty per cent. of illiteracy, with the externalism and *quasi* idolatry into which the religious life of the masses has degenerated? The future of Brazil depends upon the right education of its youth; not mere brain culture, but a sound education of head, heart and conscience, an education based upon the eternal principles of truth found only in the Holy Scriptures, in a word, Christian education. These statements may seem trite and old fashioned, but they are true and contain the *crux* of the whole matter.

The old system has produced this backward state of mental and social culture and lack of material progress; the new education will make men honest, self-reliant and self-restraining, and give them that sense of personal responsibility that distinguishes the reliable citizen, who strengthens his government, from the weakly one, who looks to it for help in every emergency. Two recent Latin writers (5) have said that it was the individual Frenchman who was keeping France back in the race, and this is true of every declining community of whatever race, so it is the individual Anglo-Saxon that is winning the battle for his community (5). It is *principles*, not *blood* that tells.

A new race of men is growing up in Brazil. The Lombard, the Tuscan, the Swiss, the Basque, the German, and the African and the Indian, with a sprinkling of English, French, Orientals and Americans, are combining with the old Portuguese stock to form a new, strong and physically beautiful race of people. The process is necessarily a slow one, but already in S. Paulo we may see that comely blending of blond and brunette—blue eyes with dark hair and olive cheeks—the powerful Teuton and the wiry Latin. This is, however, only one of the many elements that are conspiring to make Brazil the great conservative power of South America.

The population of Brazil may be safely estimated at eighteen millions. The census of 1872 showed 9,930,478, while that of 1890 gave a total of 14,333,915. None of these figures include the scattered tribes of Indians, variously estimated at from one to two millions. The increase has been much greater since 1890 than before, and may be safely calculated at 2.8 per cent. per annum. The large Italian emigration is immensely prolific, as is also the German and Swiss.

The blacks do not multiply rapidly in the middle and Southern States, and the whites are crowding them out. Just the opposite is true in the States from Bahia North, where there is little white emigration. It is only a question of time, however, when overcrowded Europe will pour her surplus population into these fertile regions of Central and Northern Brazil. The close of the present century will certainly find Brazil with a population of twenty millions, exclusive of the Indians.

There is a natural bond between Brazil and the United States in their territorial greatness, and in the oneness of their destiny. That she is in quick and sincere sympathy with us is shown by her standing alone among the nations of South America in open friendliness in the present crisis, and by the promptness with which her Government responded to ours in the matter of warships.

The Spanish-American Republics are essentially Spanish in everything but their trade, which is foreign; while the new Brazil is more and more American in the larger sense of the word, and it is this that makes Brazil an attractive field for American enterprise and for the American educator.

Brazil is not likely to sit in apathy, satisfied with her inheritance from Portugal or from the Empire, founded in Portuguese ideas, but, having captured freedom she will press forward towards the highest aspirations of a free people.

Shall we, in whose wake she follows, sit indifferent, or shall we lend a hand? If we had been true to our duty towards the Latin peoples of the Western hemisphere, Cuba would have freed herself long ago and there would be no war to-day.

(1) Large tracts of land and valuable properties are still held in Brazil by the Braganza family and their heirs.

(2) English money is the basis of all foreign trade, American money is rarely mentioned.

 (3) Compiled from recent official statements in the *Jornal do Commercio*, of Rio.
 (4) We understand that a movement is now on foot to provide for the redemption of the currency, bringing exchange gradually up to a new fixed standand, thus preventing the disasters to trade that would come from a sudden rise. (5) Sig Ferreo and M. Demonlins.

THE MUYRAKYTAN:

THE SACRED GREEN STONE OF THE AMAZONS.

In the whole realm of modern science there is scarcely a more fascinating subject than that of the evidence in favour of the fundamental unity of the human race; and, in particular, (for inhabitants alike of the Old World and the New) the



identical with those discovered in the

long chain of evidence that one finds binds the Indians (old and new) of both Americas to ancestors inhabiting some Eurasian plateau in a remote prehistoric epoch. That the race was originally evolved in some one "cradle" or centre, whence it gradually radiated and meandered by slow uncertain processes and devious ways until to-day it has spread itself over the earth, is a broad fact which has been fairly and squarely established by modern ethnological and biological research. Practically the whole surface of the globe is strewn with relics of the rude inhabitants of the Palæolithic or Ancient Stone Age. Whether we find them in the Valley of the Nile or in the gravels of California, in the drift deposits of England or in the laterite clay of India, these rough stone tools and weapons are (generally speaking) of the same . type. From Canada to Patagonia we happen upon these indisputable traces of Palæolithic man, traces

Eastern Hemisphere. Of course, this is by no means the only argument for the Asiatic origin of the American Indian. Brasseur de Borbourg, Tyler and others have pointed

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out analogies connecting the arts, the ritual and the customs of the ancient Incas and the Aztecs (the two flourishing races whom the Spaniards found dominant on landing in America) with those of Egypt, the Canary Islands, Japan, and the Eastern Archipelago, some of which are so remarkable that they cannot be fortuitous. And among the various tribes of North and South America are to be found traditions, legends, scraps of scripture, stray amulets, symbols, and sounds of speech furnishing faint traces of lost languages, all pregnant with meaning for the seeing eye, all eloquent of origins on other shores and, consequently, kinship with the common ancestors of the race.

One of the latest, least known and most interesting of such humble links in the great chain of confirmatory evidence is the Muyrakytan or Sacred Green Jade Stone of the Amazons. Among the numerous legends piously preserved by the various Indians of the Upper Amazon, that of the wonderful stone amulet, the Muyrakytan almost invariably figures in one form or other; and specimens of the stone are to be found in several of the regions hereabout. There is nothing perhaps, at first sight, particularly startling in the plain fact of a stone amulet being worn and treasured by several Indian tribes. But the interest attaching to this particular amulet of Green Jade is threefold in significance. First, there is no deposit of Jade in America, the only known deposits being in Asia; secondly, the American specimens are cut and figured in precisely the same way as the specimens found in various parts of Europe and Asia; thirdly, the American legends about the origin and use of the amulet find almost exact counterparts in Asiatic legends. Inevitable conclusion :-- The Asiatic origin of the amulet, and, by consequence, the early connection of the American Indians with Asiatics, if not the actual Asiatic origin of those Indians. Let us, therefore, endeavour to elaborate these three points of interest, and in doing so give all credit that is due to that enterprising Brazilian archæologist, Dr. Barbosa Rodrigues, who has devoted so much time and energy and learning to unravelling this engrossing mystery.

Dr. Rodrigues first discovered the existence of these Green Jade amulets among the Uaboy and Kunury Indians of the Upper Amazon and its tributaries, the Yamundá or Nhumundá, the Trombetas, and the Yatapù, which enclose the romantic region where Orellana located the famous tribe of female warriors known as the Amazons. The stones are worn suspended from the neck as sacred Talismans possessing the priceless virtue of keeping disease and misfortune at a distance; and the old Tapuya squaw, on whose neck Dr. Rodrigues found his first specimen, refused to part with her invaluable chattel for love or money. They are also found in the "Iukacauas," or burial-cases, near the lake Yacyuaruá, which was once important as the annual *rendezvous* of the ancient Amazons of which more anon. And these relics, "rich and rare," of a bygone civilization occur not only in the Amazon valley, but in many other parts of the New World, particularly in Peru, where in all the legends of the Incas we find it connected with "the Children of the Sun and the Serpent," and in Mexico among the Aztec ruins and in various parts of North America.

Now-and here is a critical point—this wonderful Muyrakytan has been definitely proved to be not the Amazonstein of German writers. It is indisputably genuine jade of the hardness and specific gravity* of the variety found in Asia. Jade or "Jadeite and Nephrite" (to adopt the scientific nomenclature of the thing) is an extremely hard fine stone, holding the sixth place among minerals. To cut and polish it would be possible only for a skilled lapidary. Yet these Muyrakytans, the heir-looms of the savage Amazons, are not only beautifully polished, but are fashioned as cylindrical discs with figures cut upon their surfaces in the shape of little fishes, miniature hatchets, or horses' heads. And these shapes and figures are identical with those of the jade amulets found in various

^{*}The specific gravity of Green Jade, or "Jadeite," is 3.338.

parts of the Old World. A stone of this jade or Nephrite of considerable size in the shape of a horse's head, found in the vicinity of the Nhumundá river, is now to be seen in the Museum of Bolougne, the celebrated museum of Pope Benedict XIV. In the ruins of "Temple of Mercurius" in France, which was destroyed A. D. 451 by the Huns (whom archæologists aver to be the ancestors of the Aztecs) Masselin tells us that he found the skeletons of tall men, among whose arms were found miniature hatchets of Green Jade, similar in form, color and character to those found in many Indian remains in Canada. And a celebrated French savant has three such stones in his possession, one found in Mexico, one in Naples, and one in Calcutta. Identical stones in the same shapes are worn by the numerous pilgrims who come annually from Kabul and Pashawar (the ancient home of the Hungarians) to visit the sacred tomb of Gul-Baba (the Father of Roses) near Budha-Pesth in Hungary. In Haiti, another locality where we find them, they are known as "Zemis" or "Gakurals" and are worn to ward off evil. China too knows the Green Jade Stone, where it goes by the name of "Yu"; and we have the learned Blondel* telling us that amulets were first made there under the Emperor Koangti so far back as 2637 B. C. Of such venerable antiquity is Green Jade and its talismanic virtue!

As we have already intimated, no deposit of jade has been found in America; and all investigations have failed to discover any evidence that any such deposit ever existed either there or in Europe. The only known deposits of Nephrite are in parts of Turkestan in the District of Yuthian (the "land of Jade or Yu") on the margins of the rivers Yu-white, Yu-green, and Yu-black. These rivers, so-called from the colour of the Jade found there, come from the Mouslagh mountains and flow to form the Great Hoang-ho or Yellow River; and some of the deposits belong to the Emperor of China. Blondel speaks of two varieties of Jade found in China, one of beautiful green, crossed with veins of blue, the other resembling a knot of wood with brown lines, adding that in many parts of China Jade is spoken of as a "knot of wood." In view of this it is significant to note that "Muyrakytan" is considered by students of the subject to be a corruption of the Tupinambá words "urbyrá" and "kytan," which means respectively "knot" and "wood."

In China, it is related in the story of the City of Khotan, taken from the Chinese Annals, written during the dynasty of Thiang, A. D. 632, that the Jade is collected from the river at full moon. Twenty or more soldiers, closely guarded by officers, plunge into the river at a given signal, and the one who first finds a specimen of Jade jumps out and has to make a red mark on a piece of paper. When the gathering or "fishing" (as it is called) is over, the pieces are collected, separated and marked and sent to Pekin under an escort. The specimens rarely exceed 40 centimeters in length. It is said that this same ceremony is still observed to-day.

Now observe the similarity of these facts concerning the finding of Jade in China, and the Amazon legends concerning the origin of the Muyraktan. Among the Uapé or Uabor Indians (already referred to) there exists the legend that at certain seasons of the year the Amazons collected on the shores of the lake "Yacyuaruá" and, after days of penance, held a feast at full moon. When the feast was over and the moon was reflected in the clear waters of the lake, they dived to the bottom and received from "the Mother of the Muyrakytan" the stones shaped as they desired and still soft but hardening on contact with the outer air. (The "Mother of Muyrakytans" is precisely the same as the "Yácumamá" legend of the Peruvian Incas.) According to another version the stones existed as living fishes in the lake; and the Amazons wounded themselves and cast the blood at the fishes: and the first fish touched by the blood immediately stopped and became a stone, which the Amazon, plunging in, seized and pre-

^{*}See Blondel's "Historic and Archoeologic Study of Chinese Yu."

sented to her lover or mate. (It was on these occasions that the Amazons received the warriors of the surrounding tribes.)

Central America has yet another curious legend contributing its mite of evidence for the connection of Asiatics with Americans. This is an Aztec legend to the effect that in the 6th or 7th century of the Christian Era (probably 648 A. D.) there appeared in Central America the genius of good, known as "Quetzulcohuatl," who brought with him the green stone and a new civilization. He taught the people to work in stone, gold and silver, and became the founder of the Empire of the Nahuas. Tradition says that some of the green stones he brought with him were preserved in Cholulo. This is confirmed by Humboldt (the great traveler), who places the date about 80 or 100 years after the seven tribes of the Aztecs who came from the seven grottoes, according to the Aztec legend. It is extremely significant, in this connection, and in view of the kinship claimed for Aztecs and Huns, to observe that the Huns (who, uniting with the Mongolians and Alanos, swept over Southern Europe, under Attilla, ("the Scourge of God ") also descended from seven families, while their kings were known as "the kings of the seven peoples"; that Huns were expelled from China 93 B. C., and only appeared in Europe 376 A. D.; that there is a Chinese tradition of an emigration to the Fou-Sang (America), and of an arrival in China in 499 A. D. of a Chinese Buddhist, bearing the cognomen of "Universal Companion" from Fou-Sang (see the translation of the "Great Chinese Annals," by De Guignes); and finally that Cardinal Newman was convinced that the Chinese reached America by the Aleutian Isles in the 5th century. The dates given certainly do not seem to coincide as satisfactorily as they might, but in this crepuscular period of plentiful myth and scanty history everything is naturally nebulous and problematical. The main thing is that rumor, legend and historical conjecture point with convincing uniformity to some connection between the Asiatics of China and the old inhabitants of America.

Again, in well nigh every legend of the South American Indians we find the Muyrakytan vaguely connected with the "Children of the Sun and the Serpent." And a variant of the legend related in the preceding paragraph has it that during the first year of the Christian Era the "Karas," Children of the Sun and the Serpent, came to America, bringing with them the arts, industries and customs of their native land. They were guided, the legend goes, by Votan or Quetzulcohuatl and peopled Mexico, Central America, New Granada and Peru. And they introduced the Sacred Green Stone, the Jade. So-called legends, it may be objected, are merely legendary and must be relegated to the interesting but valueless limbo of things apocryphal. But, after all, a legend with several variants and with tangible relics connected therewith still extant to this day, and exercising activity over a large area of different peoples, must be suspected of having somewhere or other in the past some actual fons et origo of true history. And were this one true how exquisite a key does it furnish to the puzzling problem of the old civilizations of Peru, Mexico and Central America ? It is worth remembering, in this connection, that besides the flourishing kingdoms of the Incas and the Aztecs the invading Spaniards found, in the thick and trackless forests of Yucatan, ruins of vast buildings, curious and bizarre in shape, decorated with sculptures and bas reliefs, esoteric in motive, fantastic in imagery, and exhibiting great technical skill, and that the Indians then inhabiting that district retained no tradition of that vanished nation of builders.

The primitive Karas or Nahuas, we find, descended the Andes and peopled the Upper Amazon, Peru, New Granada and Mexico, preserving the tradition of Votan, cherishing the sacred Myrakytan and mainly inhabiting the forests. And the modern Kara, a Carib, born in an age of decadence but bound to the same parent stem and still retaining the wonderful green stones, came down from the Great Antilles, where he had taken refuge in troublous times, and ascended the Amazon, settling on its south bank and inhabiting the shores of lakes and such rivers as the Tocantins, the Xingu and the Tapajos. It is a singular fact that the name "Kara" can be traced in the track of the Sacred Green Stone right along the line of its migration from Turkestan to the Nhermanda: and it is claimed, with some show of possibility, that the word "Kara" is derived from the Hindu Kalin-ago or Kaligna, the Sacred Serpent of Krishna.

As Buffon says (Œuvres complets, vi, p. 171): "Il est vrait difficile de deviner sur quel fondement les orientaux et les Americains sc sont égalment et sans communication infactués de l'idée du vertu medicinal de cette pierre verte." And we think we have succeeded (with Dr. Rodigues' help) in showing that the Asiatic orgin of the Muyrakaytans is indisputable. It only remains, therefore, to discover the routes and means by which the Asiatics made their way to American shores. This is not by any means so difficult as it seems. For instance, it has been fairly shown by ethnologists and others that the Caribs might have come from Africa. Their disposition, history, physical structure, traditions, etc., all point toward an African descent. And in the light of Captain Bligh's voyage (in modern times) in an open boat, provisioned for eight days only and loaded to the gunwales, of 3,400 miles without losing a man, it is not an abnormal strain upon credulity to suppose that an emigration drifting in the great current of the South East trades, the current that carries Cabral and Brazil, might have taken place from the lower West African coast to the West Indies. Similarly with the other Indians of the Amazon region, who have the slanting, almond-shaped eyes (grey in color and often reddened), the prominent cheek-bones and yellow complexion, and for whose Asiatic descent we have adduced so much evidence-it is not extraordinarily difficult to find for them, too, feasible routes from the Old World to the New. It should be mentioned here as a significant fact that in the main the American races approximate closely in physical characteristics to the East-Oceanic Mongoloid race, and the diffusion of Mongols and Caucasians over the globe (with the possible exception of Africa), at a remote period, is an established canon of ethnology.

Postulating the necessity for such a disposal and for a pre-historic passing from the Old World to the New, we find it easily conceivable that America could be reached either from Europe or Asia. It must be remembered that excellent arguments have been adduced [See, for instance, Dr. A. H. Kean's masterly "Ethnology" (University Press: Cambridge, England.)] for the existence of an Indo-African continent, traces of which survive in Madagascar, the Seychelles and other islands, like broken arches of a sunken bridge. And had Plato's fabled Atlantis (mentioned also by Herodotus) ever existed, an easy explanation of the route would be forthcoming. Again, ocean-surveys reveal the presence of a submarine bank stretching from Scotland by way of Iceland to Greenland, which might conceivably have once existed as a continent. And apart from this supposition, it is obvious that Behring Strait offered an easy route either by "dugout" and paddle, or, in winter, over ice. So that, in the absence of Grand Trunk railways and first-class passages on Atlantic liners, our adventurous Asiatic pioneers had no lack of means for visiting the ends of the earth in search of "fresh woods and pastures new!" Indeed, Dr. Rodigues, with as much ingenuity as audacity, goes the length of endeavoring to trace the course of the Green Jade almost right away from its original home in Central Asia. Starting from Khotan these primitive adventurers, he suggests, descended the Oxus, and passing the Aral and Caspian Seas followed the Volga northward till they struck Poland; crossing Poland, they presently reached Switzerland by a devious route, dropped down the Rhine, crossed the south of France, touching Tolona,* and then via the Pyrenes through Spain and Portugal until

^{*} It is noteworthy that the unhappy Montezuma, when he first sighted the Spanish ships, is said to have exclaimed: "It is Quetzulcohuatl who returns from Tulan!" Tula or Tulan constantly figures in records of Mexican history but was not in Mexico. It seems highly probable that the ancient Tule or Toulona is referred to.

they reached the Atlantic seaboard; and launching on the Atlantic, they soon struck the southern branch of the Gulf Stream, which carried them past the Island of Madeira and the Canaries to Cape Verde and thence across to America. Or, for a variant route, take this plausible catalogue of stations suggested by Dr. Rodrigues' fertile ingenuity in the other theory's stead: Pekin, Corea, Yellow Sea, coast of Japan, Pacific Ocean, along the current of the Kuro Siva, Aleutian Isles, Alaska, Upper California, Mexico, Panama, Amazon valley. These Muyrakytans, then, the sacred Green Stones of the ancient Amazons,

These Muyrakytans, then, the sacred Green Stones of the ancient Amazons, have led us very far afield. But a little globe-trotting in their wake, we venture to think, has done us no great harm. We have seen quaint things in many quarters, have learned lessons in history of some interest, and gathered inferences worth storing on the tablets of our memory. For all of which we say a very hearty grace to our distinguished Brazilian archæogolist, Dr. Barbosa Rodrigues.

AN AMERICAN SYSTEM OF SCHOOLS IN BRAZIL.

We believe we are correct in assuming that the American College differs from the English College as well as from the Lyceum and Gymnasium of France and Germany; that it is at once something *more* and *less* than either, but that it has not, as yet, any severely defined limit or scope of action; that our American schools, public and private, have no exact analogue in European systems, but have grown out of the needs of American society.

Whenever an attempt has been made to fit to the larger needs of American life any of the European systems, as a whole, the result has been to retard rather than advance the development of a strictly American system.

Unfortunately, *names* do not stand for much in our educational parlance. They seem to have drifted away from their etymological moorings and lost their historical connection. A University may mean more or less than a College ; the College may be a poor High School or may embrace genuine professional, or University studies; an Academy, a High School; a Seminary, a Normal School, or Institute are names that do not have any constant value, and in a large gathering of educators it was found impossible to discuss an important question of classification without first agreeing upon a definition of terms, which was found to be more difficult than the main question.

Nearly thirty years ago an attempt was made to adapt the American system of schools to Brazil, South America, where social conditions and political aspirations are somewhat analogous to our own, and we set about to find out what the American system really was. We sought it in the official courses, which usually cover the whole domain of knowledge; in the voluminous reports of Superintendents, reeking with erudition and statistics; in the schools and colleges of the different States, which we visited and studied, and in the great educational conventions. We found such a lack of uniformity of thought, of organization, and even of purpose and principles as to leave us in doubt as to whether we had as yet a distinctively American system. In some places there was genuine education, in others they were simply drilling for examination, and not a whit better than the Chinese. We made an extended tour of European institutions for a comparative study, and found many special processes and devices that could be engrafted, and singularly enough, that some of the German methods had their best development in the United States, but no complete system that could be profitably taken over *en bloc*. The great problem of how best to influence the heterogenous masses which flock to the shores of both Americas and make them into good citizens is not touched by the European systems. The problem is not exactly how to teach this or that special branch, but how to co-ordinate the work and relate all branches to the rapidly changing conditions of American society. The problem is the same in both Americas.

We found it difficult to follow the vertiginous activity of American educators along all lines or to wade through the voluminous literature which accompanies it, brought from the ends of the earth; but, believing that there was a truly American system in process of development, we tried to catch the trend of thought and anticipate the results. Entirely free, unhampered by politics or precedent ; with no fads or need of seeking favor of governments or patrons, but at liberty to select what was best from all sources, it will be readily conceded that we had a decided advantage over the educational reformer of our own country.

The following, in brief outline, has been in operation for the fourteen years in the American schools at S. Paulo, Brazil, as a result of our study, and has been eminently satisfactory.

1. A primary school of five years, with a minimum of 100 school days of five hours each per annum, for the ungraded country schools, and 210, (a full school year), for the graded city schools. This course embraces Reading, Writing and the four operations of Arithmetic. Arithmetic is made the test of advancement, but great attention is also paid to Expression and Language, and, very early, small vocabularies of the two modern languages that are to be studied systematically later, are introduced by the "natural method," (French and English by French and English teachers) with pleasure and profit to the pupils; thus in the very beginning of school life the habit of comparing modes of expression is cultivated, which later will be applied to processes. Through Geography the study of nature is begun and our relations to the world in which we live are studied; through Manual training, and the drawing preliminary to it, THINGS and their relations are studied and the child is taught to do and see as well as to think. This is that part of education which society, for its own safety, must demand for every girl and boy in the land. It is all that can be given to the masses, the very poor, the wage earner's children, who must go to work early in life. Very bright pupils, with intellectual surroundings, may complete this course easily in four years, as many have done far better than others in five.

2—A Secondary course of six years divided into two periods of three years each. This is an expansion of the primary, extending mathematics to meet all requirements of practical life; cultivating carefully the mother tongue, giving some notions of the two modern languages; thorough training in Brazilian Geography and History, with outlines of General History and Geography; Manual training and mechanical drawing, etc. This first section embraces that part of an education essential to GOOD citizenship, within reach of all, but not compulsory a short Grammar school course. The second section is a preparation for College, without, however, special reference to a college course. In it the two modern languages are finished; Algebra and Geometry are studied, Latin begun, etc., going about a year further than the average High-school course of the United States. This completes the common school system and prepares the pupil for the highest duties of citizenship.

The bright pupil who has finished the primary course in four years may complete this in five. This has been frequently done, and is the rule for those preparing for College.

The student who does this is ready for College at fifteen.

We believe the tendency of American education is to return somewhat to the *Humanities*, enrich the secondary school with studies heretofore included in the advanced courses, and thus shorten the College course. This is the language period of life and fourteen years experience has shown us that the two modern languages can be easily carried parallel to the mother tongue, with benefit to the pupil. It furnishes excellent mental discipline and has the advantage of awakening the habit of comparison earlier. There is a slight sacrifice of the mathematical or scientific side which is pushed into the next division where it logically belongs.

The first division in this system aims to reach the great mass of society and force it up to the level of *safe* and intelligent citizenship. The second reaches after the great middle class and purposes to fit its members for the highest duties of citizenship, as well as equip them for trade, manufactures and all legitimate activities, at public expense. It gives a sufficient amount of formulated knowledge and mental training to enable them to continue their studies independently through the opportunities afforded by the Press, public libraries and lectures.

The next step embraces three years of a *culture* course for that comparatively small class who desire to take a profession, or wish a *liberal education* in literature, art and sciences, as a stepping stone to still more advanced studies. Entrance to this class ought to be guarded by severe tests in order to exclude the weak-brained who want a degree simply as an ornament and because they can pay for it. The brainy, poor young man can always find means. This is the College, reduced to three years. It lies between the public school system and the specialized University courses,—not absolutely necessary but highly advisable. It is where the student is thrown into the larger current of independent action and takes on the responsibilities as well as the privileges of manhood, either to prepare for entrance into the higher spheres of active life or to enter upon other studies.

This gives a minimum of school life, at public expense, of four years and a maximum of eleven years.

Education will, therefore, be finished at these ages: The large class of children of the very poor, at ten or eleven years. Another class will go out at the end of the first period of the secondary (the old Grammar course) and enter society fairly well equipped for the ordinary pursuits of life at twelve or thirteen. The second class completes school life, at the end of the public school course, at the age of fourteen or fifteen, well educated; a still smaller class completes the liberal College course at seventeen or eighteen, while the winnowing of all classes produces the comparatively small group of scholars and professionals who are able to enter life fully equipped, with such knowledge as can be obtained from books, at twenty-one to twenty-two. The student who skips the College and short-circuits from the high school to the University may graduate from his professional course with honor at nineteen or twenty, but will always lack that something that enables the man with the wider culture and discipline to win in the race of life.

The points in which the foregoing differs from the plan commonly adopted in United States are: the introduction of two modern languages at the language period of life, for their own value, to improve the study of the mother tongue and to develop earlier the comparative process as mental discipline; the shortening of the College course to three years and reducing school life by at least two and possibly three years, leaving some of the enthusiasm of youth for the first years of independent self-supporting life, also shortening the period of parental support.

No attempt is made here to indicate the exact organization of the various courses; the purpose and logical distribution is what is sought to show. We have been able to see the finished product of the system and feel sure it is an improvement upon the old plan. This is the system of schools known as "Mackenzie College" and the "Eschola Americana" at S. Paulo, Brazil, and is intended to serve, in a modest way, as a model of American education for Brazil.

THE "SAUVA," OR LEAF-CARRYING ANT.

We are told by entomologists that there are in the world 1,250 varieties of ants and that 600 of them are found in Brazil.

Many of these little insects are only known to scientists, but there is one variety, namely, the "Saùva," that is well known to everybody throughout Brazil and other parts of the tropical world. It is so destructive to agriculture as to demand special laws for its suppression. In Brazil it goes by a great variety of indigenous names, but is most commonly known as the Sauva, or Sauba; the latter is probably the more correct, being derived from "Içá," which is Guarany for *ant*, and "Yba," *wood*—the wood or tree ant—that is, the ant that destroys trees. It is the *æcodema-cephalotes*, order of *hymenoptero*, of the books. These ants are notable for the wonderful organization of their homes, the



Fig. 1. One quarter natural size. Male, Female and Workers.

ation of their homes, the system, order and intelligence of their operations, their indefatigable industry and unerring instinct. They exist in Brazil in almost inconceivable numbers; Maregraff says of them: "Hic sunt tanto numero ut á Luzitania *Rey* do Brazil appelentur." (Figure 1.)

The adults, are of three types (Figures 1, 2). 1. The male, called in Brazil the

Çabitu. 2. The female, or Içá. 3. The workers, or imperfect females, of which there are three kinds (Figure 2). The small ones with very large heads, and strong, curved mandibles or pincers, each armed with seven teeth, that do the cutting, carrying and domestic work, the superintendents or directors, much larger than the rank and file, whose exact functions are not known but who go up and down the lines and seem to select the places of cutting; they have large polished heads (Figure 2), the joints and head being protected by sharp spines; and the big fellows with hairy heads and a twin *ocellus*, or single eye in the centre of the head, instead of the double compound eyes. These are larger, of a brownish red color and seem to have some high functions, such as engineers or captains. They are rarely seen outside, but the slightest trouble among the small workers will bring them to the surface. Only the perfect sexes have wings.

The Içá or Queen measures 35 millimeters in length and her yellowish transparent wings have a spread of about two inches. The abdomen is about 10 millimeters wide by 15 long and is protected by 4 circular plates. Its antenae have 10 joints. The male is only one-third the size of the Queen, has 5 abdominal rings and 12 joints in its antennae. Its legs are smaller and it is darker in color.

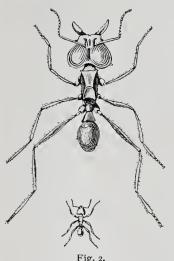
The workers are from 9 to 15 millimeters long; have strong legs, particularly the rear ones. The powerful curved pincers of all the workers shut past each other, while those of the male and female barely come together. They have only three abdominal rings and twelve strong spires to protect vulnerable parts of the body and head.

These ants burrow in the ground to a depth of 10 to 18 feet, making under-

ground canals from the central colony to openings at points from 400 to 800 yards distant. In the forests and on the uncultivated plains the mounds of granulated earth which show the locality of the formicarium, are from 10 to 50 feet in diameter and one or two feet high. The dirt from the canals leading to distant openings is usually brought out of the main road of the central home, leaving the distant holes with nothing to mark their location. The formicarium consists of from one to forty "Panellas," or pans, oven shaped chambers from 6 inches to two feet in diameter (Fig. 4), all connected by roads which enter them from below upwards (Fig. 3), generally having openings leading downwards, evidently to prevent inundation.

They show great discernment in selecting the leaves to be carried to the nest, rejecting all noxious plants, preferring rose, coffee, orange leaves and garden vegetables, removing immediately all refuse and dead insects that are placed in their holes.

They work quite as well in the dark as in the light, evidently guided by touch



instead of sight. The work is perfectly organized. The smooth-headed workers seem to select the tree or place and may be often seen a considerable distance from the home evidently hunting for work. As soon as the place is selected, if it be a tree, a road is made to the nearest opening leading to the home and the work is commenced. In old colonies the work may be begun in many places at the same time, each squad being, however, under its respective smooth-headed chief and entering by separate roads. In a single night great damage may be done. A small colony that had escaped notice, not over a year old, having only two "Pans" and being not more than 400 to 600 in number, cut and carried away in a single night all the leaves in a strawberry bed 7 by 12 feet, having a dense growth of old plants and run-A large patch of coffee trees may be comners. pletely denuded before it is noticed. There is no Two types of workers reduced one half confusion; the cutters *cut*, the carriers *carry*. The loaded ants, with a piece of a leaf held securely aloft

in their strong pincers, march to the hole on one side of the road, leave the leaf at the mouth of the hole and return on the other side of the road. The cutter goes to the outermost leaves at the top of the tree, stands upon the piece to be cut, working with legs, body and mandibles until it is detached, falling to the ground with it, only to return immediately to the tree again. The fragments carried are often many times the weight of the carrier. We picked up a little fellow one day and weighed him on a carefully adjusted pair of scales. He weighed a scant grain, while the piece of leaf he was carrying weighed six and a half grains. On being released he picked up the load again and carried it to the hole, sixty yards away. They show great courage and skill in overcoming obstacles. We have seen them bridge a rill of water, six inches wide, by filling it up with grass, in a few hours. We have seen them tunnel under a stream thirty yards wide. Whenever there is an obstacle to overcome the large hairy-headed workers from the inside come out and take charge.

The enormous bulk of leaves carried into the homes is not for food; none can be found in the "panellas," but instead, a whitish, spongy mass, into which the leaves have been converted by some mysterious process and in which are found ova, larvae and pupae, and on which is found a fungus upon which the young ants are supposed to feed. How the leaves are converted into this pulp and deprived of coloring matter is a mystery. Absolutely nothing but this pulp is found in the "panellas." The winged progenitors are found together in large numbers in the *lower* compartments, but never with the old wingless queen, who is usually alone in one of the upper ones.

The perfect sexes pass their lives in darkness, coming to the light for a brief

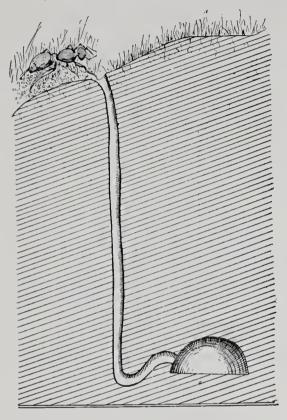


Fig. 3. Primitive "panelle." One-quarter natural size.

widened and cleared.

We were notified that it was imminent and took a position in the forks of a tree very near. Swarms of little workers were seen rushing from side to side excitedly, heads erect and mandibles open.

Everything was favorable, there had been a slight shower and the wind was blowing from the West. At 2 o'clock the large workers began to appear, the excitement increased; at 2.15, the first "Çabitùs," or males, timidly appeared, reconnoitering and returned. This was repeated several times, each time going a little further from the hole. At 2.45 the first "Iça" or female, came out in the same timid manner and returned.

Soon both male and female appeared in large numbers and the first male attempted to fly at 3.25. He fell about ten feet away and *died almost immediately*; no Içá had as yet risen. At 4.00 the flight of both male and female was started. They rose with difficulty; the flight was unsteady and weak, and the least obstacle brought them down. Soon the air was full and natives appeared to collect them for food,—and carried away several quarts. This species is frequently eaten, but the one most highly esteemed by the Indians is the *Tanujara*, a still larger kind.

They rose to a height of about twelve or fifteen feet, always against the wind, flying from 300 to 1,500 yards. The males were dead when they reached the ground, or died almost immediately. We never found a dead male more than 300 yards

space only when they "swarm." The life of the worker is supposed to be from six to eight years, while a queen may live twelve or fourteen.

The interesting question is how she retains her fertility all these years from a supposed single contact,

The "Saùva" does not make war upon other ants, but terrible battles are fought between rival colonies of saùvas, when those from a distance make an opening near.

At such times the battle-field is literally covered with fragments of heads, bodies and legs.

In Southern S. Paulo and Minas the "Saùva" *swarms*, or the perfect sexes leave home forever, from October to December. A day or two before it is to take place the principal holes are widened and the ground is cleared around them. It usually occurs after a slight shower and when a light wind is blowing. We have watched it many times.

On the 3rd. of one November we witnessed the *eruption* from an old hill, twelve feet in diameter which had, as we afterwards saw, some twenty panellas and thirty openings, twelve of which had been from the hole. There were about three times as many females as males. During the eruption we observed with great care and did not see a single contact in the air between male and female, and are inclined to believe that the mating occurs in the home, where they dwell together. We captured several pairs and confined them in bottles and jars for observation, under conditions favorable to starting a new colony. They seemed indifferent to each other, the male dying the same day and the female living only three or four days.

We carefully marked the spot where a number of females fell and burrowed. The moment the Içá falls she divests herself of her wings; curving the body,

pushing the wings forward, and, seizing them with her mandibles, wrenches them off. She now looks about for a place to locate her new home, usually on a slight declivity. She begins to dig, taking out the earth in small round pellets, entering head first and backing out until she has a hole about a foot deep and a "panella" some three inches in diameter (Fig. 3). She now closes the entrance with the pellets and secludes herself in the inner chamber.

We opened one of these nests twenty-four hours afterwards and found the queen quietly ensconced in her little chamber, though she died the next day. Four days after we opened three places, finding the queen dead in two of them. The living one seemed not to mind the disturbance, but also died the next day. On the fifteenth day we opened several places, finding the ants dead in three of them. In the third one she was alive and much agitated by the exposure. On the smooth floor of the chamber there was a tiny white spot and under the queen another. We carefully removed them and on examining them with a glass found each to consist of sixty to seventy eggs. In the abdomen of the ant were found three similar ones. It was found that about three out of four of the Içàs whose locality we Scale 1-50. • had marked, failed to survive, though no cause of death Formicarium 9 months old. could be discovered. The next observation was ninety days after the eruption. The new colony was in full operation

Fig. 4. and the little workers were denuding a small rose bush of its leaves. We found a single compartment which had been enlarged to about eight inches in diameter

and five inches high. There was a whitish mass on which the queen was found. Inside the mass were found ova, larvæ and pupe, in three stages of development. From the sizes of the workers we judged that a colony was produced every fifteen days. There were about 500 or 600 workers. One road had been opened on the side and another extended downwards about ten inches.

The fresh leaves were being left in these roads, not a vestige of one was found in the chamber. In August, nine months after the eruption, we found and opened another of the nests. Here the canals had been extended downward about ten fect and seven well formed "panellas" were found, from 5 to 9 inches in diameter (Fig. 4.)

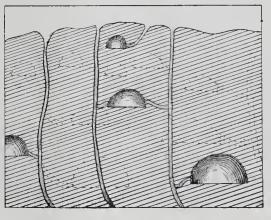


Figure 5. Partial section of old hill. Scale, 1-50.

From the lower chamber a road extended downward evidently to a distant open-

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ing. The old wingless queen was found in the second chamber, not in the least diminished in volume, brooding over the spongy mass. In all of the chambers the spongy mass was found containing *ova*, *larvæ* and *pupæ* in different stages of growth. As six months had intervened between the two last observations we cannot say how early perfect males and females are produced. We have seen that a new brood is produced every twelve or fifteen days and that in nine months the *formicarium* contained many thousands of workers, males and females, probably not less than 30,000. It would seem that the original queen remains in charge during her lifetime, just how she is substituted is not known, but we do know that these ant hills have been known to remain alive forty or fifty years and several queens must have reigned.

We do not attempt to enter upon the scientific aspects of the questions, the anatomy, the physiology, etc., of the Saùva, but leave that to systematic works of entomology, than which there is none better than "Ants, Bees, and Wasps," by Sir. John Lubbock.

In Brazil there are two methods of destroying the Saúva, one by means of bellows blowing the fumes of sulphur and nitre into the *formicarium*, after stopping up all the holes but one; another is by pouring sulphide of carbon into the holes and exploding it, thus filling the chambers with a deadly gas.

PARANÁ, THE PINE STATE.

A two days' journey by steamer, southward from the beautiful city of Rio, brings us to Paranaguá, the quaint little port of the Pine State, Paraná. We



Pine Trees of Paraná. (Araucaria Brazilienses)

traverse slowly its grassy streets, look curiously through open doorways at sanded floors, and see in shaded parlors, great bouquets of artificial flowers. At noon we leave the tropical seacoast, taking the train up the Serra to the capital, Curityba. We wind up and around noble mountains, pass over green abysses, whirl through dark tunnels, catch glimpses of gleaning waterfalls and wide outlooks over sea and land below. At dusk we are gliding over the grassy tablelands, twenty-seven hundred feet above the sea. Groups of umbrella-like pines dot the plains, and a slender new moon shines in the twilight sky.

The capital is a rapidly-growing town of some fifteen thousand inhabitants. Electric lights, and street-cars drawn by mules surprise the stranger. The low buildings of the olden time are replaced, on many streets, by fine high blocks. One sometimes sees ladies leaning on the window-sills and gazing at the passers-by, as in Rio, in the days of dolce far niente; but the general coolness of the upland climate and the influence of the active, industrious foreigner have slowly but surely modified the "wait a little," "patience" habits so aggravating to the travellers of former days. There are many schools which lessen, if they do not dissipate the shades of ignorance. One patriotic Brazilian has maintained for many years, with some help from the State, an establishment which opens its doors gratis at night to those of the working class who desire to study. The Evangelical School of the Presbyterian Mission consists of a small boarding department for girls and a large day-school for girls and boys. From the first it has met with cordial appreciation and support at the hands of the people of Paraná, and could greatly enlarge its borders if it would include a boarding school for boys. Its prosperity has alarmed the priests, who, now that thay are not supported by the Government, are much more active than formerly. There is room enough for all, and they have not diminished our attendance, except in the case of those parents who were unable to control their boys out of school hours, and depended on a boarding school to do it.

There is a beautiful church edifice recently erected for Evangelical worship, which is well filled every Sunday. The varied character of the population of the State is represented in the congregation: Brazilians, Portuguese, English, Americans, Germans, French, Swedes, Italians, Poles, and Africans. Society is organized into divers Clubs, which supply the two crying demands: balls for the ladies, and gambling for the men. Life for many is alternate drudgery and diversion. The Roman Catholic religion maintains its hold chiefly from the impetus its festivals give to social life, from the wide range it concedes to conscience, content with a nominal and financial support, and from the spiritual safety it promises one and all of its adherents. Among men there is great unrest. The more thoughtful seek in the subtle mysteries of Spiritualism or the sweet philanthropy of Masonry an outlet to reverence or a balm to conscience. But the majority, either theoretically or practically, are Materialists, Epicureans: Let us eat and drink—let the morrow take care of itself!

All round the city are little, well-cultivated properties of Germans and Italians, who bring in vegetables and fruit to their customers. Somewhat farther out are Polish colonies, whence come, on Saturday especially, great canvas-covered wagons, drawn by five horses. Sometimes a Polish wedding party arrives at the dance-hall in front of the American School, the bride in a short, wide green dress, the groom and his friends with quantities of gay ribbons streaming from their hats. Often, on a Saturday night, there is a Polish ball at this dance-hall, the merriment, by the aid of the adjoining saloon, waxing fast and furious, until it sometimes culminates in a quarrel, a fight, someone thrust out, stones thrown and windows smashed. They seem in the primitive state of good-hearted Dandie Dimmont, who thought life needed to be spiced by going to the fair and getting his head broken.

A very thrifty class of people are the Germans, who spare no effort, no sacrifice to gain a fortune and rise rapidly in commercial importance. The Protestants, among them are often rather perfunctory and intermittent in the performance of religious duties, but some of their pastors in Parana are models of devotion and untiring work. The principal industry in the State is the collection, preparation and shipment of Paraguayan tea, or *matte*. The employes in the factories of *matte*, when on duty, are curious looking creatures, covered entirely with a fine green dust.

The language of Brazil is Portuguese, but English, French and German are taught in the American school. Business demands facility in languages, and the great number of Germans in the three southern States of Brazil make the study of German especially advisable there for both men and women. Quite a sensation was created by the proposal in Germany to send a man-of-war to care for the interests of her colonists in Brazil, perhaps creating there a State.

Travelling in the Interior is on horse-back or in a diligence. One finds hotels of varying degrees of comfort in all the small cities, and, in stopping at private houses, is hospitably received by the master of the house. Everywhere you find some men of education and ability, some women of experience in managing large households, and exercising a healthful influence on society. But there are occassional nooks where crass superstition has its lair; where people worship a holy serpent, blindly obey a fanatical monk; treasure as a fetich a strip of an oxhide mantle or a bit of sewing-silk hair—this of a living, that of a dead saint.

What is life to woman in Parana? To the girl its great gift is transient diversion and a home of her own-under almost any conditions. To the woman it means home cares, pleasures, chagrins, and social success, or anxieties. the midst of this mélange of balls and business, gambling, social amenities, Ln superstition and progress, the Evangelical Church has long been quietly preaching and practicing Bible truth-by newspapers, by tracts, by long journeys of colporteurs, by neighborly visits and persuasion, by truth-telling, by family prayer, by business rectitude, by moral purity, by evident all-controlling love to God and love to man, she has gained a high position and recognized influence. Hundreds in Parana follow her banner. To her aid, in the past six years, has come the Christian School, trying to fulfill Christ's command: "Feed My lambs." Loving interest, tender hymns, earnest prayers, constant reference to the precepts of our Divine Master, study of His Holy Word, frequent pictures of the heart, the family, the community, the nation where His wishes rule supremea thousand ways of sowing the seed in young hearts have already produced fruit. Into many families where religion, if existent at all, is ceremonial and intermittent, come these sweet influences of the Spirit through childish lips, sometimes emphasized by a gentle, obedient, conscientious life. To one thus trained in the American School, what is this world? A marvel of beauty, variety and partly unvailed mystery-a great School where the many races of the great brotherhood of man are entered to learn Divine lessons-where we are, whither we go, and how we should live. To such an one, what is life? To know, to love, and to serve the Highest and the humblest.

May God make His light to shine in every corner of Brazil! M. P. D.

THE PRESBYTERIAN CHURCH IN BRAZIL.

The first Presbyterian church in Brazil was organized at Rio de Janeiro, January, 1862, by the Rev. A. G. Simonton, the pioneer missionary of the Presbyterian Board of Foreign Missions. Two persons professed their faith at the time.

God blessed the work and it progressed quietly but steadily. Presbyterian missions united to form four presbyteries and to organize an independent Synod. This Synod meets once in three years. At its last meeting, in 1897, there were reported: 76 organized churches—36 of them self-supporting—and 134 places of worship, with 5,437 communicants. 23 native Brazilian ministers, 3 licentiates and 21 foreign missionaries, 9 of the Northern and 13 of the Southern mission.

The cash contributions of the churches during the year of 1897 amounted to 226,709 milreis. These are eloquent facts.

THE VALLEY OF THE A MAZON.

Since the exploration of the Amazon regions by Lieutenants Herndon and Gibbons in 1851-3, Professors Agassiz, Hart and other naturalists have visited the valley and given some account of it from a scientific stand-point, but no connected and comprehensive account of this vast region has been given in recent years.

Agassiz says that the Amazon is not a river in the ordinary sense, but a vast inland fresh water sea, an immense basin through which numerous islands are scattered.

This enormous net work of rivers, great streams coming from the heart of the continent, many of them running parallel to each other and empyting into the Amazon, may be justly termed "the Paradise of future generations." It was closed to the outside world until a comparatively recent period by what an eminent Brazilian statesman called "the dog in the manger policy."

Now that it is a free public highway it is difficult to understand why so vast a region, so rich in natural productions and so accessible, should remain neglected by enterprising American merchants.



Early morning scene in Pará.

The search for the sources of the Nile has swallowed up lives and fortunes; the torrid plains of *Lybia Ardente*, Sahara, Timbuctoo, the heart of Africa, and even the frozen poles have been explored and a knowlege of them brought to light through dangers and at a cost a thousand times greater than is required to explore South America, which still remains "the neglected continent," and figures in the geographical maps very much as do certain distant constellations in astronomical charts. The Amazon itself is navigable 2,496 miles and is the highway of the nations of the northern half of South America. Through the Trombetas and the Rio Branco it connects Pará with the Guyanas.

The Rio Negro comes from Venezuela, and the Içá from New Grenada. The Morona, Pastoza and the Napo unite the North of Peru with New Grenada and Equador. These are on the north bank of the Amazon. On the south we have the Tapajóz and the Madeira penetrating Bolivia. The Purús, Yaruaand Yavary; the Ucayale and Huallaga reach into Peru and come from within 50 miles of Cuyaba. The head waters of the Tapajóz communicate with the waters of the Paraguay by no less than four "furos," thus uniting the La Plata and Amazon systems. The Purús is navigable 1,200 miles. The shortest route from the capital of Peru to Europe or the United States is by the Amazon.

Manàos, a seaport 1,000 miles from the sea, is the St. Louis of the Amazon, controlling the trade of the Rio Negro and reaching, through the Maderia, into the heart of Bolivia, and through the Purús into Peru.

EXPORTS FROM PARA IN FEBRUARY, 1898.

Rubber, all qualities	107.806	66
Castanhas (nuts)	3.211	hectolit.
Green hides, salted, good	44.080	kilos.
" refuse	11,634	66
Dry hides, salted, good	800	
refuse	270	
Dry hides, stretched, good	37	
reiuse	20	
Deer skins, good	3,611	kilos.
"refuse	2,466	"
Sheepskins	100	" "
Cumaru, good	186	"
interior	302	**
Fish glue, <i>gurijuba</i>	2,837	"
other hsn	380	" "
Heron plumes	8,055	grams.

The population of the valley is estimated as follows:

Brazil	6,480
Peru, Province of Loreto	1,000
Bolivia, Province of Beni 3	0,000
Venezuela I	6,000
Total of Whites	3,480

Indians, minimum estimate (probably double that number), 600,000Exports, chiefly of forest products, from Parà, during the year 1896-97 amounted £2,123,745.

A British company employs 35 steamers on the Amazon. There are over 100 steamers navigating the river from Parà. Vessels drawing 22 feet may at all times go to Manaos. Ocean steamers now navigate the Amazon as far as Iquitos, a port in Peru, 2,200 miles from Parà.

Any attempt to show the extent and complexity, the commercial or scientific importance of the great Amazon system in detail would take us far beyond the limits of this paper, our purpose is simply to call attention to the subject in the hopes of reviving an interest in it.

THE SONG OF THE EXILE.

Gonçalves Dias is, at once, the best known and best loved of Brazilian poets. His "Canção do Exilo", written while in exile where he died,-

" Minha terra tem palmeiras
" Onde canta o Sabiá
" E as aves que aqui gorgeião
" Não gorgeião como là,—

is as well known throughout Brazil and Portugal as "Home, Sweet Home" is among English speaking people.

The following very free translation of the song,—rather an amplification and adaptation to English verse,—was published in the "Jornal do Commercio" in 1891, and is from the pen of the English Consul General at Rio de Janeiro.

It is the first time we remember to have seen "*Minha Terra*" in English dress. It will give our readers some idea of the thought, but does not catch the plaintive spirit of the author or the grace, simplicity and melody of the verse :

Mine is the country where the palm trees rear Their stately head towards the azure sky, And where in accents ever soft and clear The Sabià sings her hymn of melody ; Here in my exile, say what warblers rare Can with the Sabiàs notes their own compare ?

Our skies are strewn with stars, our fields with flowers, Our woods resound with bird and insect life, Our life's a dream of love in fairy bowers, Where Nature's lavish gifts are ever rife : Bright land of Palms ! where the sweet Sabià sings The exile's heart to thee still fondly clings.

Friendless, alone, at night, I dream of thee ; My slumbering senses wrapped in peace and bliss, I see the palms ; the Sabià's melody Falls on my ears ; once more I feel the kiss Of lips I love ; I wake, the vision's gone, The Sabià to his native woods has flown.

Oh radiant vision ! fatal were thy charms, My heart, till death, to thee is closely bound, Last night, I dreamt I held thee in my arms, This morn I woke, despair was all I found. The Sabià's voice was mute, the palms were dead, A tangled wilderness remained instead.

'Twas surely some magician's potent hand Which shed this mystic glamour all around, Scattered bright flowers broadcast o'er the land; Built up the palms and filled with tuneful sound The Sabià singing as if mad with joy, Passionate longing, without alloy.

Spare me, oh God, until in peace I lie, Asleep for ever in the land I love. Then may the Sabià carol joyfully, Perched in the palms, my resting place above. So gathering in the first fruits of my love, No longer homesick, every heartache past, Bearing the sheaves for which in grief I strove, A plenteous harvest may I reap at last.

WILLIAM G. ABBOTT.

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Editor's Drawer.

BRAZILIAN COFFEE.

According to the Brazilian consul at Marseilles, Brazilian coffee is unknown to commerce, the wily dealer metamorphosing it into Moka, Mysore, Porto Rico, Guatemala or Bourbon, the only kinds that the Marseilleise coffee drinkers seem to appreciate. As for Santos and Rio, these are names of reproach given to coffees of all descriptions injured by sea water or without aroma, and generally inferior, that connoisseurs will have nothing to do with it at all.

It is an open secret that most of the coffee sold in the United States under the names of Moka, Old Government Java, Bourbon, etc., are really produced in Brazil—that more coffee is sold in New York as Old Government Java than is produced in Java. A Santos merchant recently told the writer of a shipment of 2,000 bags of S. Paulo coffee to Aden—of course it will be re-exported as genuine Moka

will be re-exported as genuine Moka. It is a well known fact that Brazil can and does produce every kind of coffee grown in the world. No pains or money has been spared to import seed from Arabia, Java, Bourbon, of the best varieties known in these places. It remains for Brazil to improve her methods of gathering and preparing for market to secure the place and price that belongs to her in the trade and among consumers. The conditions of soil and climate for the production of coffee in Brazil are unrivalled, and the vast extent of country, the rich red lands peculiarly adapted to coffee, the immunity from disease, and the abundance of labor makes it almost certain that she will practically monopolize the coffee production of the world as long as these conditions continue.

GOLD MINING.

Several new companies have recently been formed for working the rich gold deposits of Minas Geraes :

"Minas and Goyaz,"

" The Garapata,"

"The Faria Gold Mining Co.,"

"Ouro Preto Gold Mines."

The old mines—the "Morro Velho," "Gongo Secco," S. John del Rei and Rossa Grande—have been working since 1830 under English direction.

The new companies are all English. It is rather singular that these rich gold fields do not attract American capital under the very liberal mining laws of the Brazilian republic. Vast areas of the mining lands of Minas Geraes are passing quietly into English hands.

Dr. de Mendonça, the Brazilian minister, in presenting his letters of recall to President McKinley, preparatory to proceeding to his new post at Lisbon, spoke in terms of high praise of the institutions of the United States, and expressed a wish for the establishment of a Council of American Nations to control the affairs of the Western hemisphere.

The movement of Docks at Santos during the month of April was 75 ships loaded and discharged, 6,347 wagons loaded and discharged, 428,814 volumes warehoused, 603,470 delivered, their aggregate weight being 88,706 tons. This in spite of the obstructions on the only railway line to the interior and consequent failure to supply wagons.

The annual sale of grapes from the *Chacara* of D. Viridiana Prado in S. Paulo realized Rs. 44:655\$ for the Casa de Misericordia, as much as 4:000\$ being paid for a bunch by philanthropic bidders.

Trade Notes.

The following extracts are from the report of Consul-General Wagstaffe of Rio, for the year 1897 to the British foreign office:

EXPORTS. --- COFFEE.

As usual the exports from Rio during the year consisted almost exclusively of coffee, the supply of this article exceeded in quantity that of any previous season, having far surpassed all calculated expectations. The entries were as follows:

Rio	4,112,436 bags
Santos	5,919,954 ''
Total	10,032,300 bags

And the shipments from the two ports of Rio and Santos were:

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Rio	4,066,734 bags
Santos	5,620,583 ''
Total	9,587,317 "

The average value may be rated at 36s. per bag.

CROP 1896-97; AND ESTIMATED CROP, 1897-98.

The 1896-97 crop, which finished on June 30 last, yielded in Rio 3,740,887 bags, against a calculated crop of 3,750,000 bags, and in Santos, 5,104,-000 bags, against a calculated crop of 4,500,000 bags; total, 8,844,887 bags. The latest official estimate of the 1897-98 crop is as follows:

Rio	. 3,600,000 bags
Santos	. 5,500,000 ''

The private belief, however, is that it will reach 10,300,000 bags, and in support of this opinion the following figures are quoted:

Receipts in Rio from July 1st,
1867, to February 18th, 1898 3,197,523 bags
Estimated receipts from Feb-
ruary 19th to June 30th, 1898 902,477 "
Receipts in Santos from July
1st, 1897, to February 18,
1898
Estimated receipts from Feb-
ruary 19th to June 30th, 1898 951,841 "
Total 10.300.000 bags

ESTIMATED CROP, 1898-99.

The official estimates of the 1898-99 crop are very low, 2,500,000 bags for Rio Sud 4,250,000 bags for Santos, or 6,750,000 bags for the two ports. Private calculations, however, rate this coming crop as follows:

Τ	otal								. 9,000,000 bags

The Victoria export crop for 1895-96 yielded 303,438 bags, and that for 1895-97, 404,555 bags. The stock in Rio on December 31, 1897, was calculated at 376,325 bags, and on February 18, 1898, at 297,929 bags, while the stock in Santos on the same date was 897,260 bags. The quality of the current crop is good.

INVESTMENT OF FOREIGN CAPITAL IN COFFEE ESTATES.

An interesting feature of the transactions of the year is the increase of foreign capital which has been invested in Brazilian coffee plantations. It is reported that extensive properties in the States of Santo Paulo and Minas Geraes have been acquired by European syndicates, chiefly English. and it is also said that a company has been organized at Antwerp, which will have a branch at Santos for the purpose of buying coffee of the planters direct, and selling it by retail in Europe for account of the said planters.

CULTIVATION OF CEREALS.

It is particularly satisfactory to note that planters have at last awakened to the necessity of raising other crops besides coffee. It is stated that during this year there will be large crops at least of Indian corn and beans, which are very important items among the cereals consumed in this country.

In order to enable planters to get their produce to market on favorable terms, and so encourage the extension of this industry, the Government has reduced the freight for corn, beans, rice, etc., by the Central Railway, so that a ton of such produce will be conveyed for a distance of 500 kilometers for 20 milreis, or 115.

IMMIGRATION.

The following table shows the nationalities of the greater number of immigrants arrived in Brazil from the year 1855 to 1895, extracted from the Statistical Report, Immigration Department, for 1897:

Italian	702,680
Portuguese	
Spanish	
German	
Russian	
Austrian	
French	
British	2,714

The total number of immigrants in Brazil in 1895 was 1,543,246.

FINANCES.

In 1896 the revenue of the State of Bahia was as follows:

Ordinary	8,366,982	\$725
Extraordinary	3,504,504	245
Total	11,871,486	\$970
In 1897 it was as follow	'S:	
Ordinary	10,581,865	\$913
Extraordinary	3,248,166	915

Total.... 13,830,032 \$528

The increase was, consequently,

1,958,545 \$558. The expenditures amounted in 1896 to 11,823,611 \$762, and in 1897 to 13,774,432 \$316, the increase being, consequently, 1,950,820 \$554.

The principal source of revenue is the export duty on tobacco, coffee, cacao, hides and skins, and piassava, which in 1890 produced the following sums:

Tobacco	3,604,505	\$985
Coffee		
Cacao	1,355,557	287
Hides and Skins		
Piassava	234,407	149

Total..... 7,094,932 \$345

The State Treasury estimates the revenue for 1899 at 14,130,820 \$712, and the expenditure at 14,328,77? \$832.

MANGANESE ORE.

Manganese ore has formed an article of export during the past four years. The quantities shipped by Messrs. Airosa & Co., and Mr. C. Wigg, who exploit the mines have been as follows:

(a)	1894	1,390 tons
(a)	1895	5,490 ''
(a)	1896	14,120 "
(b)	1897	8,000 "
	(a) To Middleshorough	

(b) To Philadelphia.

This mineral is brought from the district of Miguel Burnier, in the State of Minas Geraes, which is connected by the Central Railway with Rio de Janeiro. The distance is about 310 miles, and the transport occupies from eight to ten days. The mines are situated at an altitude of 4,000 feet, in a pleasant and healthy climate, and the labor employed is chiefly Italian and native, with some Spanish and Portugese. Owing to insufficiency of rolling-stock and other difficulties, the railway can at present transport only 1,800 tons per month. The rate of freight is high, and the conditions generably are not favorable to the development of this industry. It is expected that about 20,000 tons of ore will be shipped this year.

A sample (sent to the Association of the Chambers of Commerce) of manganese ore given by Mr. Airosa, taken from the mine at Lafayette, Minas Geraes, and said to contain 60 per cent., accompanies this report.

AMERICAN TRADE WITH BRAZIL FOR THE MONTH OF JAN., 1898.

Exports to Brazil: Wheat, flour, etc Provisions, meats, etc Mineral oils Cars, wagons, etc Sundries	\$328.142 168,579 135,561 93,206 169,114
Total	\$995,602
Imports from Brazil:	
Cacoa	\$16,245
Coffee	4,629,586
Rubber	1,696,020
Sugar, not above 16 stand.	414,448
Total\$	

Balance in favor of Brazil.\$5,206,534

Increase of exports over corresponding period of 1897, seventeen per cent.

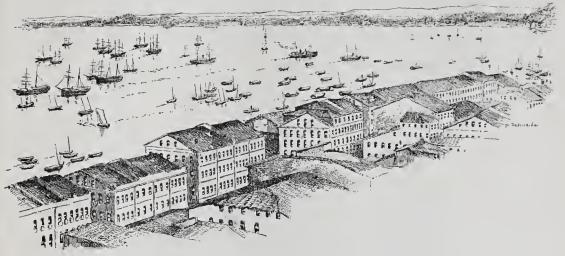
THE BRAZILIAN BULLETIN.

AN EPIDEMIC OF PROPHETISM IN BRAZIL. (1)

Brazil has been recently visited by an eruption of prophets great and small, maniacs followed by simple souls or lawless adventurers—occasionally a mixture of both—which has disturbed the central government and occupied the attention of the people.

The most remarkable of these fanatics, Antonio Maciel, called by his followers "The Counsellor," was killed October, 1897, by the government troops sent against him, and which he had held in check for many months. Apart from the political and religious aspect of this epidemic, there is a side which cannot fail to attract the student of sociology and philosophy. It involves certain conditions of society at large, no less than the individual characters, which are curious and instructive to study.

Antonio Maciel had, by inheritance, a morbid and unstable character. He was a small but prosperous farmer in the State of Ceará and belonged to a family of impulsive epileptics, several members of which had committed crimes in fits of uncontrolable passion. He had himself already attracted public attention (and this was the keynote of his after life), by a double assassination committed under



The Bay of Bahia seen from the upper city.

circumstances peculiarly dramatic. Led, by information maliciously given him by his mother, to suspect the fidelity of his wife, he feigned absence from home and surprised a man, as he supposed, entering his house by night. He shot the supposed man dead and stabbed his wife to death. The man proved to be his own mother in disgnise. In view of the circumstances, the proved hereditary taint and the long period of insanity which followed the act, he was recommended to mercy by the jury and sentenced to a short period of imprisonment. Maciel left prison completely transformed. His pyschological tendencies remained, but his mind had received a new direction. He sold all he had and gave it to the poor. and, completely overwhelmed by a sense of expiation, retired to the far interior of Bahia, where his natural intelligence soon made him the real Counsellor of the rude people of the country.

• So much for the man. In considering the environment and influence which made it possible for him to act we must not forget that the people of the interior of Brazil vacilate between a spontaneous fetichism and the mysticism of Roman Catholicism with little or no intellectual culture—a condition most favorable to the advent of prophets. Under the double influence of this fetichism and the ceremonies of Catholicism they are rendered peculiarly apt to receive the revelations of any visionary, as coming direct from God. This state of mind is common to a large class of poor creatures over a vast extent of the country, and the noise of the various expeditions sent against the "Counsellor" helps us to understand the propagation of the phenomena. It is one of those cases of unconscious imitation which M. Tarde (2) has studied and which plays such an important part in sociology.

To these general causes we may add certain peculiar subsiduary circumstances which may have contributed to the phenomena. Here, in a limited sense, we may see a repercussion of economic and political events; the sudden transformation of the government, and moral abandonment of the people by the clergy following the separation of Church from State; the numerous slaves, suddenly freed and left unemployed, constituted, with the semi-nomad inhabitants of the interior, a large class ready to follow the first visionary adventurer who would lead them. It was this element which gave color to the charge of *banditism* made against the "Counsellor," and the other Messiahs, his imitators. We thus see the moral and material conditions which rendered possible these hybrid manifestations and raised up numerous emulators of the "Counsellor" throughout all Brazil. They appeared in Ceará, in S. Matheus, in Espirito Santo, on the frontiers of Pará, in the State of S. Paulo, in the interior of Santa Catherina, near the border of Rio Grande do Sul and even in the suburbs of Rio de Janeiro.

In Ceará it was a priest, Cicero Romano, who brought out the new doctrine. He claimed that his mission was identical with that of the "Conselheiro," with whom he said he was in communication.

There is, however, no proof that the "Conselheiro" ever heard of him. It is certain that he never practiced and probably never heard of the demoniacal manifestations of hysterism cultivated by the Ceará prophet in the person of a certain Maria de Araujo.

The "Conselheiro" had set up in Canudos a kind of theocratic government in which he was absolute head. He demanded of his followers that they should give up all property and made himself the custodian of the commonwealth. He was at once the chief, the father confessor and the provider of his people. Cicero Romano does not appear to have attempted any organization whatever, but was completely absorbed by his mysticism which was but a reflex of his priestly education. The difference in culture between these two men explain the difference in their methods—the priest, saturated with theology, drifted towards mysteries of the black art in the company of one *possessed*—the "Conselheiro," unlettered, ignorant of metaphysics, spontaneous and impulsive, sought happiness in despising the world and its riches, under the influence of the doctrines which he found in the Gospel, as declared by the Apostles. We thus see how far apart in method and character *these* two prophets were.

On the banks of the S. Matheus it was quite different. There the fanatics called themselves by the general name of *Kabula*, and their rites resembled those of African fetichism. The authorities wisely let them alone. They adored *Tata*. Is not Buddhism freely practiced in Paris? In what then is *Tata* more subversive of order than Buddha?

The group of fanatics established on the borders of Rio Grande and Santa Catherina gave more trouble. There were about 150 men and a large number of women in a hamlet of sixty-two cabins. They claimed to be in spiritual communication with the "Conselheiro," the Messiah of Canudos, and to have frequent messages from him, though separated by hundreds of leagues of uninhabited country. Their religion was of an easy type, their honesty more than doubtful. Their prophet, a deserter from the army, was arrested by the police. They promptly elected another one, Sutil d'Oliveira, who became the head of this company of religious bandits, which the authorities soon dispersed. At Thomasino, in the State of S. Paulo, another group of fanatics appeared with a prophet who received his inspiration from the "Conselheiro," through mysterious spiritual communications. Others appeared at different places under circumstances more or less identical.

While the various prophets had slight resemblance to each other in lives or motives, there was much in common. Their success in drawing to themselves number was due, no doubt, to similar conditions. It is one of those singular cases of moral contagion which sometimes disturbs a whole country and makes an epoch in its history.

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Notes from the diary of an American lady long resident in Brazil; "When Antonio Maciel recovered from his insanity he was profoundly melancholy. He turned to religion as his one hope, not a religion of form, but of the heart. He read the Bible. Hc taught the people that love to God should inspire a pure and beneficent life. He went about building churches and little by little was followed by an increasing number of people who called him the "Counsellor," and revered him as a saint. It is a matter of discussion whether to his teachings he added any dicta of his own. Money was left with a certain merchant to pay for material for a church building. The merchant embezzled the money and when the money or material was demanded of him he complained to the state government that the fanatics were threatening him. Soldiers were sent to protect him. They attacked the Conselheiro and were defeated. Priests complained to the Archbishop that their means of livelihood were in danger from the teachings of the Conselheiro and the Archbishop sent a missionary to him. (The one whose report is translated below.)



FIEL RETRATO DO FANATICO, ANTONIO CONSELHEIRO. (FAITHFUL PORTRAIT OF THE FANATIC, ANTONIO CONSELHEIRO.)

"Certified to by the Rev. Father João Evangelista do Monte Marciano, author

of the luminous report presented in 1895, to his Excellency Mgr. the Archbishop of Bahia, concerning Antonio Conselheiro, of the difficult journey he made and of his entrance to the encampment of Canudos, May 13th, 1895.

The Reverend Missionary states : "The Fanatic, Antonio Conselheiro, whose family name is Antonio Vicente Mendes Maciel, of Ceará has, a white but sunburned skin, of spare build, of little physical vigor and evidently a victim of some chronic disease which causes frequent fits of violent coughing. He wears a long gown of cotton goods, goes bare headed carrying in his hand a stout staff. His unkempt hair, falling about his shoulders, is long and curly, streaked with white. His eyes, deeply set, he rarely raises from the ground to look at anyone. His face is long and of almost cadaveric pallor."

"His grave and penitent aspect gives him an appearance that contributes not a little to attract the simple ignorant people of our savage interior."

"Among the members of his body guard is found the notorious Joâo Abbade, a village chief or boss, native of Tucano, charged with two murders; also José Venancio, the author of eighteen assassinations—both dressed in a cotton shirt, blouse and trousers, with a cap of the same material, all wearing sandals."

Spiritual complaints availed nothing and a political color was given to the movement and the aforesaid fanatics were cried down as *monarchists*. Again the State sent troops; they too were utterly routed. The Government of the State now complained to the Federal Government and asked for aid to put down and crush out these pestiferous non-conformists and monarchists. In an evil hour the Federal Government was induced to send an expedition of infantry and artillery against "the Conselheiro," *who attacked nobody*. The first expedition, thinking discretion the better part, retired after coming in plain sight of Canudos. The second was routed, the arms and ammunition captured and the leader slain. Then followed the last expedition, dragging through months, taxing the resources of the army and ending in the destruction of Canudos, the death of the "Conselheiro," and the horrible reprisals that followed. The head of the "Conselheiro" was sent to a museum (?).

There is little doubt about there having been a real grievance, a commercial and a moral wrong practiced upon the "Conselheiro" by local authorities.—Ed.

(1) Translated and abridged from an article by Oscar d'Araujo, in the "Revue Encyclopedique of January, 1898.

(2) See appended report.

(3) Gabriel Tarde, "Les Lois de l'Imitation "-Felix Alcan, Paris.

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BENDIGO.

THE GREAT BRAZILIAN METEORITE.

It was known for more than a hundred years that a large mass of meteoric iron lay at Monte-Santo, not far from Canudos, in the interior of Bahia, Brazil. As early as 1781 this mass of native iron was discovered by a farmer named Bernadino de Motta Botelho, while looking for his cattle. A local poet mentions it as having fallen from the heavens in fire and smoke when his grandmother was a child.

Mr. Mornay, an English gentleman, visited the spot in 1811, examined the mass, and in 1816 communicated the result of his visit to the Royal Society of London (Phil. T. of the R. Society of London, 1816, p. I., pp. 270-285), and transcribed from the archives at Bahia the story of its discovery and of an attempt to remove it to Bahia. It appears that in 1785, with some 30 men and 20 yoke of oxen, it was moved from its original bed and carried about 100 yards on a rude cart, but, unable to cross a stream known as "Bendigó," from which the mass received its name, it remained in the bed of the brook, where it was found 26 years after by Mr. Mornay, still on the rude cart, thus rendering it easy to take its exact dimensions, which were 7, 4 and 2 feet respectively. Its contents was estimated at 28 cubic feet and its weight at 1,400 lbs. The surface is described as marked by shallow indentations as if made with a round-headed hammer and by cavities from the diameter of a 12 pound cannon ball to that of a musket The surface, particularly the under side, was covered with a thick coat of ball. oxide. On digging at the original place of discovery, the bed from which the mass had been removed was found, three feet from the surface, to be about a foot thick, composed of scales or flattened pieces of limonite rock. Another account of the meteorite is given by Spix and Martius, who visited it in 1818, adding little, however, to that already given by Mornay; both are interesting and conclusive as to the character of the mass. After laboring for a whole day with files, saws, hammers and chisels, to detach a specimen, these travellers piled wood on the mass and kept a vigorous fire for twenty-four hours, by which means they succeeded in detaching several fragments, the largest of which was deposited in the Museum at Munich.

Through the efforts of an officer of the Brazilian navy, Dr. Carvalho Filho, and others, and the generosity of Vicount de Guáhy, who defrayed all of the expenses, the enormous mass was transported over a wild mountainous country without roads, crossing many streams of considerable size, more than 100 kilometers, to the nearest railroad station; thence by rail to Bahia and by water to Rio, where it is now deposited in the National Museum. The work of its removal was begun September, 1887, and it was not till June, 1888, that it reached Rio.

A full account of this splendid achievement was published in French and Portuguese the same year, and at the meeting of the American Association for the Advancement of Science, held at Indianapolis August 20-26, 1890, the matter was presented by Prof. Orville A. Derby, and resolutions passed recognizing the valuable services of these gentlemen.

A very complete scientific study of this meteorite, with numerous illustrations, exhaustive chemical analysis and microscopical examinations, has been made by the well known geologist, Prof. O. A. Derby,—than whom no man in Brazil is better qualified,—and may be found in Vol. IX of the archives of the Museum of Rio, written in English and Portuguese.

As to the length of time the mass may have lain at Monte Santo before its discovery, Prof. Derby attaches little importance to the verses alluding to the fall "in a terrible flash of lightning, a thundering noise and a suffocating dust," in the infancy of the poet's grandmother, as the belief that a stroke of lightning is accompanied by the fall of a solid body, is common in Brazil. It is supposed that these thunderbolts enter the ground and appear spontaneously at the surface after a lapse of seven years.

Prof. Derby considers that there are various circumstances in favor of the meteorite's having fallen many years ago—probably centuries. The present crust on the under side of the mass was formed in 102 years, between the first and second removal. Comparing the ferruginous material, a foot thick, found in the original bed, with its present covering, would indicate an age of five or six centuries, assuming that the rate of oxidation had been uniform.

The exact dimensions of the mass are : length, 1.86 metres; greatest width,

1.45 metres; present width, including cut portions, 1.3 metres; extreme thickness, 0.58 metres; mean thickness, 0.35 metres; weight, 5,360 kilograms. The piece cut off weighs 62 kilos.

These notes were compiled from Prof. Derby's paper, above referred to, by permission of the author.

CAMÕENS IN AN ENGLISH DRESS.*

To one dipping for the first time into that great Portuguese epic, Camoen's "Os Lusíadas," there comes some such exhilarating feeling as Keats has told us he experienced "on first looking into Chapman's Homer." A new planet shines into one's view. And yet not wholly new, for obviously this "star hath had elsewhere its setting, and coming from afar." Indeed, to travel in these realms of gold is to be forcibly reminded now of the bright and equable speed of Homer's narrative (in the original Greek), the musical current of his verse, the "Surge and Thunder of the Odyssey," now of the smooth, limpid flow and sustained grandeur of the Æneid, "la déconverte de Mozambigue, de Mélinde et de Calcut a été chantée par le Camoens, dont le poème fait sentir quelque chose des charmes de l'Odyssée et de la magnificence de l'Enéide," was the shrewd appreciation of Montesquieu. Modelling himself admittedly on the prince of Roman poets, he has been termed (naturally enough) "the Virgil of Portugal," and of all Portuguese poets he is manifestly the one most suited for the title. To our mind, however, an apter parallel were found in Lucan, that Lucan whose transparent excellences and as transparent defects made Shelley, on the one hand, rank him above Virgil, Nieburh, on the other hand, denounce him as "a bad poet," and Scaliger charge him with barking, not singing. Quintilian, again, saw in him rather the rhetorician than the poet; while Macaulay has set it on record that he knew "no declaration, not even Cicero's best, which equals some passages in the Pharsalia." "The trumpet tone of Lucan," finds an easy parallel in "the organ voice" of Camoens at his best. And, while the native dignity of his mind, his masterly simplicity of diction, the tranquil and flexible current of his narrative, raise him to the side of his master, his occasional dullness, his discursiveness (pardonable, perhaps, in an epic of ten cantos, but slightly irritating), the hyperbolical and slightly stilted expression of his patriotism seem (in contradistinction) to land him along side of the lesser Latin poet.

But, when all is said and done, "The Lusiads" remains a classic, one of the pardonable glories of European literature. Camoens is (in the expressive phrase of Mr. Henry James), "one of those subjects which are always in order," and "The Lusiads" are justly described by Hallam, as "the first successful attempt in modern Europe to construct an epic poem on the ancient model." And yet of the Anglo-Saxon speaking thousands, who devour indigestible novels by the score, and rush to read the latest hide-bound, if superior, sonneteers and the

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^{*} Luiz de Camões, the most imposing Character of Portuguese literature, belongs to the period that produced Shakespeare, Rabellais, Martin Luther, Tasso, Ariosto, etc., a period and a country where all gentlemen were soldiers. He was, therefore, a soldier, and cultivated letters as a pastime. He came of an old fidalgo family; was born in 1525, graduated from the University of Coimbra; attached himself to the Court of Don John III., fell in love with a titled lady; was banished to Africa; passed a life of great agitation and misfortune; returned to Portugal, and after much delay and many disappointments, published his great epic, dying in poverty and obscurity, just before his country fell into the hands of Spain, in 1580.

newest Miltons, how comparatively few there are who know and love their Camoens! True, the Portuguese language is practically an unread tonguethough by no means difficult of mastery for those familiar with Latin, and possessed of the ordinary advantages of a liberal education. And to those who know it, how attractive are its many winsome graces, its power, its flexibility, its essential beauty! And in the hands of Camoens, the father of the language, the 'well undefiled' of that fine language which he, more than any other, enriched and refined" (vide Southey on the subject) how splendid and vital and knowledgable a thing it is! But to day, to appreciate the (as near as mortal ingenuity can reproduce it) full flavor of Camoens, there is no need to read him in the original. There is, at any rate, no excuse for thus "standing aloof in giant ignorance," nor has been these twenty years—not (to be precise) since Mr. J. J. Aubertin published his metrical translation in 1878. Prior to that, several translations had been made, but of these all Aubertin's (published in London, by Kegan, Paul, Trench & Co., and republished in 1884) is incom-parably the best. His is, in fact, *the* definitive translation of Portugal's great epic. It is a translation done in the *Ottava Rima*, that most difficult of verse-forms in which Camoens cast his epic; and, for the convenience of the reader (English or Portuguese), the original stanzas are printed throughout, side by side with the translated stanzas. Of course, as was inevitable from the very nature of the process of translation out of a limpid, pellucid language into one less congenitally so, a certain proportion of the poem's subtle quality of music evaporates ; and, equally, of course, the exigencies of English prevent him from reproducing the curious effect of the "feminine" or double rhymes, with which Camoens has consistently decorated his stanzas. But the supreme and overmastering merit of Aubertin's translation is that the whole is vitally instinct with the pervasive spirit of the original. The historical truth of the poem is preserved untarnished, and still does it bear the impress of the original creator's personality in contradistinction to that of the translator. The latter's is dutifully merged, in scholarly deference and care for truth. How different is Aubertin's masterly piece of work from that version of "Homer" by George Chapman, to which we referred at the outset, and which is less a translation than an essentially Elizabethian tale "written about Achilles and Ulysses," just as Pope's "Homer" was an essentially Augustan paraphrase.

It has been said that the art of translation is not so much a lost art as one that has not yet been found. Perhaps this is a true saying. But it is a fair contention that Aubertin's work is as nearly ideal as translation (in the true sense of the word) could well be. At any rate, so far as Camoens is concerned, there is none to equal it, and a better will never be wanted. Line by line he has taken his original and rendered it almost word for word into nervous and easy English. Sir Richard Burton, than whom there could scarcely be better judge, considered it "a masterpiece of translation." A perfect master of Camoensian idiom, by reason of his long residence in Brazil and careful study of Portuguese literature, Aubertin is able to reproduce for us, with wonderful fidelity and felicity, those special beauties of figurative grammatical expression which are the peculiar characteristics of the poet's individual style. Letter and spirit, technique and historical truth, are reproduced as nearly intact as scholarship and care and profound appreciation could make them or as the exigencies of an alien tongue allowed.

But apart from the appeal of its special literary excellences—so successfully adumbrated by Aubertin—the poem has yet another powerful claim on the attention of modern readers. We mean, of course, the central theme to which the epic owes its being—the pivot on which the whole scheme and superstructure of the poem swing. "Os Lusíadas, or the Luisiads" is an epic poem written primarily in apotheosis of the great Portuguese navigator, Vasco de Gama, and mainly devoted to the celebration and description of the famous voyage by which he made the really epoch-making discovery of an ocean passage between Europe and India. Setting sail from Lisbon in 1497, he doubled the Cape of Good Hope (then known as the "Cape of Storms") four months later, and made Calcutta on the South-west coast of India in the month of May, 1498 (just 400 years ago!). James Thompson, the graceful poet of the "Seasons," has a characteristic line or two in reference to this momentous performance :---

"With such mad seas the daring Gama fought, For many a day and many a dreadful night, Incessant laboring round the Stormy Cape, By bold ambition led."

The immediate effect of this great discovery was the establishment by the Portuguese of an extensive and most opulent commercial empire in the East. Calecut was the emporium of India, and prior to this the Moslems had been masters of the Eastern seas. But now the Portuguese seized almost the entire trade and purveyed the immensely valuable productions of the East to every part of Europe and India. Thenceforward the trade between Europe and India was completely diverted from the old channels by the Red Sea to Alexandria or from the Persian Gulf to Constantinople or the Mediterranean ports. The change occurred at a most crucial period of history, when the Ottoman Empire was at its most prosperous and overweening condition, and the Sultans would in the ordinary course of events have obtained absolute and permanent control of Indo-European trade. During the rapid extension of Portuguese activity that followed (up to 1548) the Moors and the Turks were completely defeated by a series of splendid successes on the part of the men of this marvellous little kingdom. And it is the fortunes and activities of Portugal during this glorious epoch and the commanding genius of the Portuguese nation (in addition to the special exploits of his hero Gama) that Camoens sings so proudly, so sweetly, so heroically in his moving epic. (The title, "Os Lusiadas," it is worth explaining, is interpreted to mean the "feats of the Lusians or Lusitanians," Lusitania being the classical name of the ancient province corresponding to Portugal of to-day.) But for the unrivalled enterprise and energy of Portuguese adventurers in those early days, and the brilliant initiative of de Gama, the map of Europe and Asia would probably wear a very different aspect from the present one; and doubtless that of Brazil would too, for Brazil was accidentally discovered by Pedro Alvarez Cabral, who was given the command of the first fleet projected to follow up de Gama's discovery. Thus the ultimate historical significance of de Gama's fleet must be incalculable.

Short of reading a whole canto or at least a rounded episode, it is impossible to gain an adequate idea of the extremely easy and equable flow of the translator's verse; but perhaps a suggestion may be gathered from the following reproduction of the well-known Correggio stanzas" as they have been aptly called (Canto II, 36-38), so characteristic in their clear coloring and warmthand ease of much of Camoens best descriptive passages, and a capital instance of the conspicuous skill with which Aubertin handles the difficult *Ottava Rima*:

The curling locks of gold were spread to view Upon her breast, which darkened e'en the snow; Here milky bosom trembled as she flew Where love was sporting, but in nought did show; Out of her waist, so white, flames amorous grew, Wherewith all hearts the urchin made to glow, Climbing the columns smooth, desires abound, And these like ivy they encircle round.

With fine silk web she doth her charms conceal, As one whose natural care is modesty;

Yet doth the veil not hide nor all reveal, Scarfing the roseate lilies scantily; But that fond love a double flame may feel

The subtle robe in front must pendent be.

Now through all heaven 'tis felt that she doth move Vulcan with jealousies, and Mars with love ! Thus, in angelical similitude, Showing a sadness mingled with her smile, Like lady whom her lover, somewhat rude, In amorous playfulness had chanced to spoil; Who laughs and scolds together while she woos, And turns offended, pleased though all the while, The Goddess now, matchless by all confessed, More sweet than sad the Father thus addressed.

It is fair to say that Camoens is not often to be caught in this melting mood of luxury and love, pre-eminently Spenserian; but the passage is such an admirable example of the pellucid simplicity of his diction, it were surely pity not to quote it. More often, indeed, his mood is gnomic, hortative, admonishing, severely ethical. Whiles he will break forth into magnificent, fierce-hearted declamation (as in the last ten stanzas of Canto IV), whiles he will indulge in tender exhortatation and dignified rebuke. The poem, indeed, is but a thin veil through which a large and loving personality shows clear. There is a good deal of truth in Hallam's observation that "as the mirror of a heart so full of love, courage, generosity and patriotism as that of Camoens 'The Lusiad' can never fail to please us, whatever place we may assign to it in the records of poetical genius." Of purely picturesque passages, graceful and pretty, sometimes really beautiful, and always crystal clear, there are legion; but in general they are too long for quotation; the charming picture in (Canto IX) of the Enchanted Isle "midmost the beating of the steely sea " should be read entire, and the description of the Waterspout (in Canto v) is a wonderful piece of word-painting worth remembering,

H. G. N.

MAKING MEN IN BRAZIL.

There is no other raw material so uniformly good as boys. Take them the world over and they average about the same, and respond to the same influences. If there is any difference between Brazilian and American children, it is due to the tropical maturity of the former, and the winter-bred energy of the latter. Bright and dull, enterprising and stupid, frank and sly, honorable and mean, every boy and every trait found in an American class, can be matched here. But the process of manufacture does much to improve or to mar any raw material, and Brazilian boys are often sadly mishandled.

Three varieties of schools are open to the boys of Brazil:—Public primary schools, private or priestly schools of every grade up to college entrance, and government professional schools. No school in Brazil, except Mackenzie College, tries to offer a course equivalent to the B. A. or the B. S. course of an American college. In these circumstances the mission of the Protestant educationalist in Brazil is plain. He stands for conscientious care of the boys, for liberty measured by responsibility in every successive stage, for serious work in every grade. Clean, purposeful manhood is his ideal.

Our schools have accomplished much. Some thousands of pupils have experienced our regime, and to-day are living witnesses to its value. Other schools have been obliged to adopt many of our theories, even if they fail in applying them. The leaven is working in the lower grades of school life. With God's blessing the whole system can be revolutionized, if men and money are forthcoming to carry the work to its material completion.

W. A. W.

RUNNING THE FORTS.

The world is interested, just now, in knowing something of the relative value of coast defences and battleships. Admiral Dewey's feat at Manilla has given new value to the study. His ships had no difficulty in running past the fortifications on either side, unobserved; it is difficult to say what would have happened if the shore batteries had been trained on them.

Under these circumstances it will not be amiss to recall an incident of the naval revolt in Brazil, of 1894.

The revolting squadron under Rear-Admiral de Mello consisted of the Aquidaban, Jupiter, Republic, Tamandaré, and a number of armed merchant vessels and small craft. The principal ship, however, was the battleship Aquidaban, a steel vessel of 4,950 tons displacement, having a citadel and turret armored with 10-inch plates and mounting four 9.2-inch B. L. R. Armstrongs; four 5.7-inch Whitworths (B. L. R.); six 4.7-inch rapid-fire; two 2-inch, eleven 1-inch, five .45-inch Nordenfeldts and five torpedo tubes. A masted double turret, twin screws, speed of only 7 knots, built in 1885. Complement, 355 men.

The harbor of Rio de Janeiro has a shore line of 180 miles and would afford anchorage for the fleets of the world, but its entrance is a deep channel, less than a mile wide, protected by two powerful forts and a shore battery. The distance between the battery on the Lage, where all vessels must pass, and the Fort of Santa Cruz, is less than half a mile; that between the fort of S. John and Santa Cruz is seven-eighths of a mile. Santa Cruz mounted two 10-inch Armstrongs and several smaller guns; S. John, at that time, had one 10-inch Armstrong; Lage had three 6-inch Whitworths and some smaller pieces. Gragoatá had a high powered gun, apparently 6-inch.

On the 1st of December, 1894, the Aquidaban, accompanied by the Esperança, a small armed (823 tons) transport with 200 troops aboard, forced a passage out of the harbor and passed the forts at 1 o'clock A. M., in the full blaze of two powerful search lights and under a terrific plunging fire from Santa Cruz and the raking fire of Lage and S. John. The transport was kept in advance and the battleship made every possible effort to draw upon itself the beams of the search lights, responding to the fire of the forts with her full batteries. The Aquidaban received a shell in her coal bunkers and several projectiles fell on her decks, but no one was hurt. The Esperança was hit and her machinery injured, her chief engineer and two men killed and several wounded.

On the 12th of the same month the Aquidaban returned and again ran past the forts under a heavy fire, but received no injury until some three miles up the bay when two shells from the Armação battery hit her, wounding two men. Again on the 22nd, she ran the gauntlet at 3.45 A. M. uninjured, though in the full blaze of the search lights and under fire from the 10-inch Armstrongs. She was finally sunk, off Desterro, some time after, by a Schwartzkopf torpedo.

The chief lesson to be learned from this is the demonstration of the value of battleships for offensive and defensive operations, and the little value of coast defense batteries or forts against them. The Aquidaban practically held possession of Rio harbor and had the city and the coast at her mercy for six months, despite the well-armed forts and batteries on shore that could work at short range. (The Fort of Villegagnon, in possession of the rebels, mounted an 8-inch M. L. Armstrong. This was hit squarely in the muzzle by a shot from S. John, the tube was split and the carriage shattered, which shows that the gunners could hit something.

The conclusion drawn by tacticians, from the exploits of the Aquidaban, was that battleships would be prominent units in attack or defence in the wars of the future.

HISTORICAL SKETCH OF PROTESTANT MISSIONS IN BRAZIL.

A most interesting episode in the history of the early Protestant Church is its first attempt to engage in foreign missions.

Before the Pilgrim's foot had touched Plymouth Rock, or the Cavilier had ascended the James, 300 Huguenots had landed in Brazil.

Admiral Gaspard de Coligny, to whom a statue (tardy recognition) has just been erected in France, was undoubtedly the greatest figure in French Protestantism. He was one of the victims of St. Bartholomew. He attempted to found a great Christian commonwealth in Brazil, where full liberty of conscience could be enjoyed, and in 1555 sent an expedition to Rio, under the Breton, Rear Admiral Nicolas Durand Villegagnon, who, on arriving at Rio, took possession and fortified an island, which still bears his name. Dissensions arose, the Norman element revolted, the colony did not prosper, and in 1557 another expedition was sent with a reinforcement of 300 men. It was at this time that the Protestant Church at Geneva, attracted by accounts of the peaceful character of the natives, sent a band of missionaries, consisting of two ministers and fourteen students. This was Calvin's Church, and it is fair to infer that he organized the mission. The leader of the little band was the learned and godly Jean Boles. The colony came to naught through the wickedness and treachery of its leader, Villegagnon, who betrayed his countrymen to the Portuguese and renounced Protestantism. He is known among French Protestants, to this day, as the Cain of America.

In the hands of a better man this attempt at Protestant colonization might have succeeded, under the lax colonial policy of Don John III., but on his death, his mother, Catherine of Austria, who became regent, adopted a vigorous policy and sent against the French a fleet, under the redoutable Christover de Barros, who, with the land forces, under Mem de Sá, utterly routed the French and drove them from the coast in 1567.

Boles and a few of his companions had escaped from Villegagnon and retired to S. Vicente, near the port of Santos, where they took up work among the Indians. Boles preached and labored with such zeal that soon not only Indians, but the Portuguese were drawn to him. The Jesuits, unable to answer him, resorted to a favorite argument, accused him and his companions of heresy and sedition, and sent them back to Rio. One of his companions, Chartier, had returned to Geneva with an appeal to the Mother Church; four of the others— Mathieu Vermiel, Pierre Bourdon, André La Fon, and Jean du Bordel were put to death by Villegagnon himself. John Boles was sent to Bahia, where for eight years he suffered the tortures common in that cruel age. When the French were driven out, in 1567, he was brought to Rio, executed and burned.

It is said that the Jesuit, Joseph Anchieta, a man who has many claims upon the respect and admiration of the world for his self-sacrificing work among the Indians, was so far carried away by the fierce fanaticism of the times as to aid, with his own hands, in the execution.

In 1624 the Dutch invaded Brazil and held different parts of the coast from Bahia to Maranham, under Prince Maurice de Nassau, until 1654.

During this period missionary work was not neglected. Godly Protestant ministers settled in the country, several religious books were printed in Portuguese and a catechism was published in the Indian tongue.

Under the terms of the treaty of "Taborda" the Dutch wholly withdrew from Brazil. So complete was the evacuation that very few names are found among Brazilian families of to-day, but many monuments of their intelligence and industry, in the in the shape of harbor improvements, forts and public buildings may be seen along the coast. In those days Portugal was wont to make thorough work with heresy and heretics and no vestige of these thirty years of missionary work remains. —(Continued.)

THE LIFE OF CHRIST.

BY DR. JOSE CARLOS RODRIGUES.

We copy the following editorial remarks of the *Brazilian Bulletin* as an example of the impressions made upon the average editor by a serious article on a religious subject. It gives an idea of the rarity of such writings in Brazilian journalism.

The article referred to is probably an advance chapter of the Life of Christ to which Dr. Rodrigues has given much time and on which he works *con amore*:

Dr. Rodrigues is well known in the United States, where he spent many years of his life and where he has many personal friends. He was the editor and proprietor of the Novo Mundo, published in New York for clrculation in Brazil, where it exerted a potential influence in liberalizing public opinion. Soon after coming to the United States he spent a winter in Princeton where he studied Greek under Professor Cameron. He is a close Bible student and a man of wide reading. He is now the editor of the Jornal do Commercio of Rio, the oldest, largest and most influential paper in Brazil, and probably in South America.

In the material and somewhat ignoble existence most of us foreigners lead in our struggle with Fortune, far from the softening influences of early association and the suggestion of more cultivated surroundings, essays like that of Dr. J. C. Rodrigues in the *Jornal* of Thursday and Friday, come as a surprise and relief.

A surprise because we have become so unaccustomed to hear such matters treated, that we had nigh forgotton that such problems existed; and relief to be reminded that the end of aim of life is not after all to simply heap up more or less riches, and that there are other and nobler aims to which we all vaguəly aspire, although they may have become so blurred and indistinct as to be almost unrecognizable. Yet there they are, impressed on memory's page and awaiting only a suggestion to waken to activity, alas! too ephemeral.

And to the doubters, hesitating on the threshold of belief, and lacking only the helping hand that brings couvictions to the assistance of reason, no argument can appeal with greater force than to note superior minds of infinite varying moulds animated by the same certainty of belief that drive some men out in the wilderness to preach to the world the glad tidings they received, takes others cheerfully to the stake in its defense, and converts the pages of the somewhat prosaic *Jornal* into the ardent defender and propagandist of the Christian faith.

and propagandist of the Christian faith. When, too, this conviction has been reached in the midst of uncogenial and antagonistic surroundings by analytical methor's exacting ample proof of all assertions, others unable to arrive at the same felicitous condition of mind and not daring to protend, are apt to wonder if, after all, there it not something beyond and outside their philosophies that through their limitations they are forbidden to penetrate. there may be something that is the *truth* and the only real test of reason itself, and measured by which half our cherished theories might perchance be swept away as so much rubbish, and the teachings of religion, rejected as childish legends, turn out to be the corner stone of the very edifice they were so proudly erecting.

Reflections such as these cannot but be wholesome, and if Dr. Rodriguez has only succeeded in awakening counterdoubts in doubters' minds, his zeal will not have been wasted nor his unction thrown away.

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COFFEE.—It is a grave mistake on the part of the Brazilian coffee merchant to attempt to minimize the output of coffee for the purpose of putting up the price. The enormous producing capacity cannot be concealed: climate, soil, immunity from disease and abundant labor, conspire to make Brazil the great coffee producing country of the world. The better policy would be to stimulate production and promote consumption.

According to the recent message of the President to the Brazilian Congress the value of the 9,717,493 bags of coffee sold abroad last year was only £14,725,139, while the average annual value of recent years has exceeded £24,000,000, a reduction of £9,273,771 in the balance of trade to which he attributes the bad condition of exchange. It is undoubtedly one of the causes, but not the chief cause, which may be found in the nature and volume of the currency.

Revier

FACTS ABOUT BRAZIL.

Brazil is one-fifteenth of the habitable world, one-fifth of both Americas, threesevenths of South America. It is larger than the United States and her territories (leaving out Alaska), and fourteen times as large as France. It has a coast line of nearly five thousand miles and possesses forty-two sea ports, among which are the largest and best of the world. Within these limits are found the unexplored and almost boundless selvas of the great Amazonian basin in the north, a large slice of the rich pampas in the south, and by far the largest of the three great elevated masses that constitute the bulk of the continent, in the center. These table lands, well watered, well timbered and possessing a climate unparalleled in the tropic regions of the earth, represent about four sevenths of the whole country. As a rule the high plateaus are of exceptional salubrity. These broad areas of fertile farming land, rich pastures and almost inexhaustible supplies of timber and minerals are rendered easily accessible through the natural highways furnished by the three great river systems-the Amazon on the north, the La Plata on the south, the San Francisco in the centre. The Amazon, among its numerous affluents and tributaries, numbers twenty rivers larger than the Rhine, and it holds in its mouth an island larger than Switzerland, almost as large as England.

The material resources of Brazil are almost incalculable. The range of its productions embraces the products of both the temperate and torrid zone—the cereals, cattle, sheep, horses, cotton, sugar, coffee, rice, rubber, drugs, dye-stuffs, precious metals, iron and other minerals.

The climate of Brazil is varied, and on the whole very favorable. Being on the eastern side of the continent, it is milder and more healthful, even on the coast, than the corresponding latitudes on the west coast of Africa, which lies just opposite, across the South Atlantic ocean. The northern parts are always warm; yet the natives there prefer their own climate to that of even Rio de Janeiro, where the variation is quite sensible, though not very great. The part which lies in the south temperate zone enjoys a delightful climate, will produce the grains, fruits, etc., of the north temperate zone, and is well suited for emigrants from the north of Europe.

The mineral resources of Brazil are unquestionably very great, but so far unimproved to any useful extent, save precious stones and gold. The conditions for sustaining an immense population everywhere abound, when once properly developed and improved.

Brazil was discovered about A. D. 1500, and was soon after taken possession of by the Portuguese, and continued to be a colony of Portugal till 1822, when it was declared independent, under the title of the Empire of Brazil. In 1889 it revolted and became a republic, adopting a constitution and system of government similar to our own. It is divided into twenty States and a neutral district, where its capital, Rio de Janeiro, is situated.

The white population of Brazil is chiefly of Portuguese extraction; and hence the Portuguese element prevails in the institutions of the country, in the customs and habits of the people, and in every department of life. The civilization, though in general less advanced than in the more favored portions of Europe and the United States, is still European.

The language of the country is the Portuguese, a sister language to the Spanish, but clearly a distinct language. It is a beautiful language, and has been appropriately styled the eldest daughter of the Latin. It is compact, expressive, flexible, and well adapted for oratory and literature.

RELIGIOUS INSTRUCTION IN SCHOOLS.

There is much vague talk about religious teaching, its relation to other branches, the time that can be given to it, its character, etc.

In order to show what we think about it, we venture to give extracts from our last annual circular to the teachers of the American schools at S. Paulo on the subject.

General considerations to which the attention of young teachers is called:

I.—The opening of school is not a religious ceremony, but a *devotional* exercise. If arranged with skill it may be made so attractive to children that none will want to miss it (thus tardiness may be diminished); if it holds attention, it cannot fail to teach the lesson.

2.—We may easily overestimate the value of perfunctory religious exercises, as we may also overestimate the capacity of children to understand formulated religious truth. The child's perceptions are duller in this than in other branches of knowledge, where his senses are engaged, hence the necessity of grading it more carefully and watching its effects more closely.

3.—Schools are not chiefly, nor primarily, to teach religion, *i. e.* to instruct in creeds. Considered in its relation to courses of study, religious instruction is a *means* for the development of character and for giving a sure foundation for moral training; but, in its relation to the pupil, it is an absolute *end*; giving to him, as he can comprehend it, the saving truths of Christianity.

The first is directly related to courses of study and from it definite results may be expected; the other depends upon the subtleand immeasurable spiritual power of the Christian teacher, and no definite results can be demanded. The first has a recognizable, educational value and its correlates are easily found; the other has no appreciable relation to hours of recitation or quantity of matter and cannot enter into any plan of correlation of studies. It touches all studies and permeates all methods, the greatest result often coming from the least matter; its educational value, therefore, cannot be measured.

matter; its educational value, therefore, cannot be measured. 4.—We may not safely assume that the child has received from parents or church proper religious instruction, but we may suppose, in nominally Christian lands, that it has some ideas, however vague and erroneous, of God. It is the duty of the teacher to adjust these ideas to the truth, and so relate them to the child that he may *feel sure* that *there is a God*, though he cannot see Him,—Who is All-wise, All-seeing, All-powerful; Who is everywhere and who loves him, the child, personally; that God is his Heavenly Father; that the Bible is God's Word, sent to him, the child, and to everybody else; that God sent His Son to save the world; that Christ is God and God is Christ; that God made everything,—even we ourselves are the work of His hand. These are fundamentals, and must precede all other instruction. The clearness with which the children perceive these truths will depend largely upon the skill and spiritual power of the teacher.

5.—The teacher should carefully avoid lecturing little children on religious subjects. Do not let the idea that the Bible is a Protestant book, get a foothold in the school. The three things essential to religious teaching are: 1.—The Holy Bible, God's Word, 2.—Sacred Song. 3.—With very small pupils, in fact with any pupils, the most important factor is the *Christian teacher*, who works through personal influence, contact, example of Christian living and doing —(slow to anger and quick to forgive). Every child must be made to feel that the teacher is interested *in him personally*; and the teacher must watch closely the child's growing power to appreciate spiritual things.

6.—The Bible furnishes abundant material for all grades of religious instruction, from the kindergarten to the college. It abounds in romantic and intensely interesting episodes calculated to excite the imagination, interest the young and fix the attention,—if the teacher have the skill to adapt it to the demands of the child, as he is obliged to adapt other branches of school work.

7.—Every Christian teacher should be a diligent student of the Bible, particularly the New Testament. Very little formal instruction can be given in religion in the lower primary grades, much, however, is taught by *seeing* the conduct and *feeling* the touch of the teacher who has heard the "follow Me" spoken to Andrew and Simon.

8.—No revival or pulpit methods, no pressure of an emotional kind is to be made in any department of the school to induce children to become Protestants. Protestantism is not to be lauded nor Romanism attacked. The Word of God is a cure for all false beliefs and a sure guide to right living.

The above precedes the specific directions for the organization of the work in the different grades,—selections of Scripture, hymns, Bible narrative, etc., and is enough to show the principles on which we proceed.

THE BRAZILIAN BULLETIN.

BRIEF HISTORICAL NOTE OF THE PROTESTANT COLLEGE AT S. PAULO, BRAZIL, EMBRACING "MACKENZIE COLLEGE."

The College was incorporated by the Board of Regents of the University of the State of New York in July, 1890. The purpose which the trustees had in view in seeking incorporation in this country was to extend and perpetuate the type of Christian education commenced by the Presbyterian Mission in 1870, form an institution of learning of high grade, which should represent the American type of higher education and the American theory, that the ideal school is the ideal community, and thus give to Brazil a complete system of American schools on a Christian foundation.

Permission had been granted to the Mission in 1880, by the General Assembly of the Presbyterian Church in the United States of America, to found, at S. Paulo, Brazil, an undenominational Christian College, and this was it. The mission school had grown into a complete graded system of primary, intermediate, grammar and high school instruction with more than 500 pupils of both sexes, having a Normal class for training its own teachers, a manual training shop under skilled direction—the first and only one in Brazil—and a Kindergarten, also the first one in Brazil. It was patronized by all classes and had more applicants than



College Residence.

places. Out of it had come, largely, the reorganization of the public schools on the American model. The time had come to provide an American College for the pupils of the American school who had finished the graded course, and for as many others as cared to come, and could pass the entrance examinations.

As soon as it became certain that the College could hold property in Brazil under its New York charter, the Board of Missions turned over to the trustees about four acres of land, which had been given by the Rev. G. W. Chamberlain and wife, and two buildings, one used as a boarding house for about forty pupils of the school ; the other, built with funds given by John Sinclair, Esq., of New York, and in use as a manual training school. Through another donation of 5,000 square meters of land, by Rev. and Mrs. Chamberlain, a gift of \$2,500 from Col. J. J. McCook, of New York, and funds solicited in the United States, contiguous properties were added, making the total land holdings of the College to-day 34,482 square meters, or about 8.6 acres, located in what was formerly a suburb of the city of S. Paulo, but now within city limits and in a populous neighborhood. This land has enormously increased in value, being now worth two hundred times its original cost.

In 1891, John T. Mackenzie, Esq., of New York City, offered to the College \$50,000 for the erection of a three-story building, to be known as Mackenzie College and to be occupied in connection with the work of the Protestant College. Of this amount only \$42,000 was received before his death. With this money a fine building was erected after the general style of the Mark Hopkins Memorial Hall at Williams College. This is now the main College building, occupied for recitations, lectures and laboratory, the third story being also temporarily used as a dormitory. In 1894, an additional house was built for the smaller pupils of the lower school, with funds given by Dr. Gunning, of Edinburgh, Scotland. In 1896, a refectory was built for the college students.

college students. This, with the house occupied by the President, and a small house on the land purchased by Col. McCook's gift, constitutes the property now held, in fee simple, by the College.

The College was opened in 1892, with a small class of students who had completed the course in the Mission school, taking up the equivalent of the Senior preparatory work of the American academy.

It was found that students entering from other schools came very poorly prepared as to their ability to study, though they could pass our entrance examination, and that the class could not be held up to severe college work without a larger proportion of students trained in American methods of study; for these reasons a *second* preparatory year was added and the sequence of classes interrupted until a larger group from the lower school, could be ensured. At the beginning of 1894, a strong class came up, which has since been doing satisfactory work. This was the real beginning of the College. We are now assured of an unbroken succession of classes advancing regularly towards college entrance. The rate of increase has been thirty-eight per cent. per annum, in spite of a high standard of entrance examinations, for all who have not come regularly up through the graded course, and the high grade of work demanded after entrance.



A Glimpse of the Day- School.

In 1895, the Board of Foreign Missions transferred to the College the entire control of all departments of the mission school, as well as control of the property, thus unifying the work of education. The mission schools at Bahia, Larangeiras and Curityba are administered as branches.

The total enrollment for 1807, in all departments, was 528 pupils and students; of this number 60 were in the College. The class in full work from the beginning of the year was 54. Six who had been conditioned in the beginning of the year were able to enter the class in July. The branches at Curityba, Bahia and Larangeiras have over 400 pupils.

BOARD OF TRUSTEES.

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THE BRAZILIAN BULLETIN.

FACULTY OF THE PROTESTANT (MACKENZIE) COLLEGE, AT

S. PAULO, BRAZIL.

MACKENZIE COLLEGE.

H. M. LANE, M. D.	President
WILLIAM A. WADDELL, B. A., C. E., Ph. D. (Union)	Dean
AUGUSTUS F. SHAW, M. A. (Yale)	Registrar
LORENZO C. LYON, M. A., (Princeton)	Librarian
Rev. M. P. B. CARVALHOSA, (Mission Seminary, 1872).	
FRANCISCO RODRIGUES DOS SANCTOS SARAIVA Lit D. and D. C. L.	

(Coimbra, 1850). ANTONIO DE BARROS BARRETO, (Lieut. Br. Naval School).

ANTONIO DE BARROS BARRETO, (Lieut. Br. Naval School). ERNEST CAPERAN B. L. (University Toulouse, France). ALBERTO LOEFGREN, (Univ. Stockholm, Sweden). A. R. ALDRIDGE, (Kingston, England). LOIUS RITTERBUSH, (German-American Normal School, Milwaukee, Wis.) CHARLES A. ARMSTRONG, (Winchester, Eng.). EDUARDO WALLER, (Näas Slöjd-Seminar, Sweden).

Occasional lectures on scientific subjects from outsiders.

INSTRUCTORS OF NORMAL CLASS.

MISS MARGARET SCOTT, (S. José Normal) Methods and Courses
H. M. LANE, M. D Director Pedagogics; Portuguese Literature
R. K. LANE (Adelbert)
Mme. SOPHIA YUNKER
Mme. E. CARVALHO (nee Hess)
BENEDICTO DE CAMPOS
Rev. M. P. B. CARVALHOSA

CORPS OF TEACHERS IN THE GRADED PREPARATORY SCHOOL.

MISS SCOTT, in charge of Primary and Intermediate Rooms.

H. M. LANE, Principal. R. K. LANE MISS MINNIE BAXTER. MME. YUNKER. MME. CARVALHO. FRAULEIN CLOTILDE SPIERLING. FRAULEIN CLOTILDE SFIERLIN MISS EVANGELINE ADAMS. MISS ADA LINDSEY. D. BELLA D. CARVALHOSA. D. EDUARDA DE MELLO. D. MARGARIDA DE CAMARGO.

D. MARIA PORTUGAL. D. MARIANA RIBEIRO. D. BEATRIZ TRULHOS. D. MANOELITA PEREIRA. D. ADELIA RIBEIRO. MISS JESSIE JUSTICE, In school at Bahia, temporarily. MISS NELLIE JUSTICE, In school at Bahia, temporarily. Rev. M. P. B. CARVALHOSA. BENEDICTO F. DE CAMPOS.

ASSISTANTS.

AMELIA DE SOUSA. ADA LOEFGREN.

IDA ORECCHIA. NOEMI DA CUNHA.

Eleven of these teachers and the four assistants were entirely educated in the school, from primary school to end of Normal course

THE COLLEGE YEAR.

Being situated in the Southern Hemisphere the *long* or summer vacation comes in December and January, and the college year corresponds to the calendar year. The year is divided into two semesters; the first beginning on the first Wednesday of February and closing on the last Thursday before the 23rd of June; the second beginning on the first Tuesday in July and ending on the last Thursday of November. The school year is identical with that of the college, except that it begins two days

earlier and closes a day later.

The national holidays of Brazil and the religious holidays of the Church Universal are observed.

ENTRANCE EXAMINATIONS.

Examinations are held on the Monday and Tuesday preceding the opening of the first semester and the Monday preceding the second semester for those students who were *conditioned* at the beginning of the year. A student may not be conditioned in more than two studies and these must be made up by the end of the first semester.

COURSES OF STUDY.

The college conducts a six years course under one administration and with the same faculty. This course is divided into two sections of three years each. The first consists of two years of High School work and the *Freshman* year of the American system and is known as the *Curso Superior*, or *Gymnasium*. It is all strictly required work and completes the *Disciplinary* studies. This is the second section of the secondary course of six years and is under the college faculty, the first section being in the lower school. The second division, or College, is made up entirely of elective courses.

REQUIREMENTS FOR ADMISSION.

For admission to the College course, a student must be *16 years old, of good moral character and must pass a satisfactory examination in all subjects embraced in the first five years of the secondary course. In the regular course the final examination would come a year later, but in order to conform to the requirements of the Board of Regents of the University of the State of New York the formal college entrance examinations are held at the end of the fifth year of the secondary course at the minimum age of 15* years. At this point the student has had the full equivalent of what is demanded in the American four years High School or



A Group of Pupils in "Internato."

Preparatory course (much more in Latin, Portuguese and two modern languages). The "maturity" examination is, however, not held until the secondary course is completed, which embraces the work of the Freshman year of American colleges.

DEPARTMENTS OF INSTRUCTION.

MATHEMATICS.

All of algebra; geometry, analytic and descriptive; trigonometry; calculus, land surveying, mechanical drawing. Professors Waddell, Barreto and Instructor Armstrong.

MECHANICS AND PHYSICS.

These branches receive the same attention as is given in American colleges. Professors Shaw and Frick and Instructor Waller.

PORTUGUESE.

This is the language of the country and is given the place recently accorded to English in the United States. It takes up the study of later Latin, out of regular course, with that of

*Equivalent in physical and mental development to 17 or 18 years in our country.

THE BRAZILIAN BULLETIN.

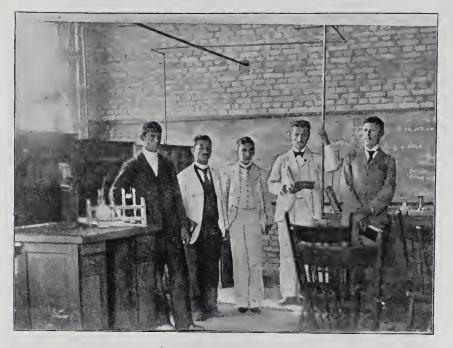
early Portuguese, which is a kind of Latin. It continues through the entire school and college course. Comparative grammar and literature very thorough.

Professors Sanctos Saraiva and Carvalhosa.

MODERN LANGUAGES.

This branch receives much more attention than is given in any American institution. The study of English and French commences and is practically finished, as to the grammar and ability to translate at sight and write fairly well, in the preparatory school. At the end of the fourth year of secondary course the students receive instruction and use text-books in French and English and the preparatory school and use text-books in French and English. The course of English literature and reading is the same as demanded in American colleges; that of French is equivalent to that demanded by the French Lyceë. German is elective and is little studied.

Professors Caperan, Lyon, Armstrong and Aldridge.



In the Laboratory. CHEMISTRY.

This takes three semesters; all of second and half of third year in laboratory. Professors Shaw and Barreto.

BIOLOGY.

Two years required, may extend through the entire course. Field work in botany; laboratory work and comparative studies. Professors Lane, Loefgren and Shaw.

GEOLOGY PALAEONTOLOGY.

Through the fifth year. Chair vacant. Occasional lectures by outside professionals.

HISTORY AND SOCIOLOGY.

General history required three semesters. French and English history are a part of the respective courses. Professors Waddell and Sanctos Saraiya.

MENTAL AND MORAL PHILOSOPHY.

Begins at the fourth year and receives the attention given in Union College. Professors Waddell and Carvalhosa.

RHEFORIC AND LOGIC.

Two courses, one in English for students preparing for the study of theology, under Professor Waddell; and another in the regular course, under Professor Sanctos Saraiva, and include criticisms and construction.

THE BRAZILIAN BULLETIN.

LATIN.

This branch is taught in the preparatory course, in the grammar school, as a basis of the study of early Portuguese. In the College and University course it receives the development only possible in a Latin country. The professor in charge of this branch is the author of a Latino-Portuguese dictionary, an advanced Latin grammar, and is a noted scholar.

GREEK.

Greek is not commenced until the last year (the 3rd) of the Gymnasium, or disciplinary, course. Chassang's Granmar, in French, three books of the Anabasis and one book of the Iliad are read. In the Literary or Classical course the study may be continued as in corres-ponding department of American Colleges. There is a special course for students preparing for the study of theology embracing New Testament Greek. It is dropped in the scientific and engineering courses at end of third year or omitted altogether in Civil Engineering course.

Professors Caperan and Lyon.



Back view of buildings from the Campus.

BIBLE STUDY.

New and Old Testament study is given a very prominent place throughout the course, Old Testament characters, divided monarchies and location of Prophets; Life of Christ. Evidences of Christianity. New Testament studies, etc. The Bible is used as a text-book throughout.

Prof. Rev. Carvalhosa.

LAND SURVEYING.

There is a special course in what is known in Portuguese as "Geographical Engin-eering"—Land Surveying. In second year much field work is done with level and transit. Line Surveying. Determination of Areas. Farm Surveying. Use of Chain. Adjustment of Instruments. Field Practice in Elementary Triangulation. Survey of Plantations. Con-touring and Topographical Surveys, etc., etc.

Profs. Waddell and Frick.

At end of second year a certificate of Land Surveyor is given to students who have done all the work of the course in a satisfactory manner.

THE SCIENCES.

Are taught in laboratory and field as practically as possible. There is also a higher commercial course under Professor Carvalhosa.

Only three courses are at present attempted—Scientific, Engineering and Literary. The Engineering course may be completed at end of third year by eliminating Greek alto-gether from the course. The Scientific and Literary courses are completed at end of third year, and students who have done all the work demanded in a satisfactory manner receive the degree of B.S. B.F. or B.J. the degree of B. S., B. E. or B. L.

For the Bachelor's degree a student must have preserved a good character record, pass a satisfactory examination in every subject designated in his course and present an acceptable thesis for graduation.

For the Master's degree the applicant must give notice to the Faculty, a year in advance, of his intention to try for the degree, present a printed thesis on an original subject, which, if satisfactory, he will be called upon to discuss before the Faculty, publicly. The degrees to be granted by Board of Trustees on recommendation of Faculty.

In the future, examinations will be fiscalized and diplomas issued by the Board of Regents.

EXAMINATIONS.

These are held frequently, informally, and are rather of the nature of reviews than a test of knowledge. They are held for the benefit of the pupil or student and are both written and oral. The monthly examination in the secondary course and the quarterly in the college are arranged by the faculty and not by the teachers.

We believe there has been more miscarriage of good intentions, more downright injustice and more unnecessary suffering resulting from the old "finals," on which the fate of the student was made to depend, than from any other of the old erroneous processes. The student is ranked on the work done throughout the year. The "points" honestly earned are not to be lost through nervousness, worry or home trouble, in a fatal "final."



In the Manual Training Shop.

There is a final examination for the "maturity" certificate and for college graduation, in which opportunity is given to improve, but no failure is permitted to destroy the standing already honestly earned and credited.

A pupil of the secondary school or a student may pass on his record, without the *final*; or may recover lost ground in the final, which, in such cases, is prolonged and thorough. A high annual average is demanded in all departments to enable the pupil or student to pass from one grade to another. They must know well the subjects taught, and be able to do the next thing.

GENERAL PLAN OF INSTRUCTION.

In the general scope of work an attempt is made to follow the plan adopted in Union College, modified, however, to suit a Latin people and language. Disciplinary work through study of languages is much more satisfactory among Latin

peoples than that obtained through the study of mathematics; modern languages, therefore, dip into the courses of the lower school, in fact, begin with the first primary class and continue all the way through. They awaken early the habit of comparison and make it easy to study well.

College work commences a year or two sooner than in American colleges, as the first year of the American college is included in the secondary course. The disciplinary work is completed at a point corresponding to beginning of Sophomore year in the American system.

At this point the student drops the general course and selects one which has direct reference to his life work, whether it be law, medicine or some other department of activity. The result is that he may enter the professional courses two years in advance, and may finish the engineering course and receive his C. E., with an additional year.

We offer at present three courses.

GENERAL PLAN.

The periods of recitation are of fifty minutes. In field and laboratory they are much longer. A certain amount is demanded and student must take as much time as is needed to accomplish it. No equivalent is accepted for either field or laboratory work and no student is permitted to go on without completing this part of his work.

LITERARY, 3 YEARS	5.	SCIENTIFIC, 3	YEARS.	ENGINEERING, 3	YEARS.
Mathematics	16%	Mathematics	24%	Mathematics	18²/3%
Latin	16%	Science	18%	Analytics	14%
Greek	16%	Greek	16%	Applied M.	I 5 ¹ / ₃
Science	12%	Philosophy	4%	Science	22 ¹ / ₃ %
Philosophy	8%	Sociology	4%	Philosophy	2%
Sociology	4%	Bible	91/3%	Bible	9 ¹ /3%
Bible	91/3%	History	5 1/3%	Portuguese	5 1/3%
History	51/3%	Portuguese	5 1/3%	English	5 1/3%
Portuguese	51/3%	English	4%	French	5 1/3%
Electives	8%	French	4%	Electives	1/3%
Licenves		Electives	6%		
	100				100
			100		

Minimum recitations seventeen hours a week. No lectures before the beginning of the third year.

About 60% of the work is done in Portuguese. About 20% of the work is done in English. About 20% of the work is done in French.

PUBLICATIONS OF SCHOOL AND COLLEGE. (IN PORTUGUESE.)

A history of Brazil, 2nd Edition.

An Elementary Geography, 12th Edition.

A Complete Atlas and Geography,-nearly ready for the press.

A Portuguese Grammar, 4th Edition.

A Text-book on language, for primary teaching, 2nd Edition.

An English Method for Portuguese learners, 3rd Edition.

A series of 7 Arithmetic Tablets. 2d Edition.

Portuguese Reading Books, a series of 4 books.

American Copy-books,-A series of 7 grades.

A set of 24 Reading Tablets.

SYLLABI:

Complete course of Portuguese grammar and literature.

Study of Arithmetic, by grades.

Sacred History, 40 lessons.

Ancient Geography, 6 lectures.

Outlines of General History,-a three-years' course.

Latin, notes on a three years' course.

Religious Instruction,-general principles and outline.

Experiments in Chemistry.

Outlines of Physiology and Anatomy,-comparative studies.

Method of study of Geography, outlines of course.

Principles and methods of study of Mathematics, from primary lessons in numbers to finish of College course for teachers.

The study of modern languages in grammar school,—its value as mental discipline, outline of course. Observations of results for teachers.



Port of Santos.

Santos is one of the oldest settlements of Brazil, having been founded by Braz Cubas in 1543. It is situated on the northern shore of the Island of Engua-Guaçú. It is the principal sea-port of the State of S. Paulo, and has a population estimated at 25,000. It has a good, but not spacious harbor, and is supplied with excellent docks. Through it the exports and imports of the State of S. Paulo and part of those of Southern Minas must pass. There is no other outlet. Its over-sea trade for 1896 amounted to \$160,534,624, about 30 per cent. of the whole trade of the country.



Mackenzie College.

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NUMBER 2.

BRAZILIAN ULLEJAN

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COLLEGE

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Vedes a grande terra que continua Vai de Callisto ao seu contrario polo

Da Sancta Cruz o nome lhe poreis. Lusiads, X.139-40.

H.SCHEDLER ENG

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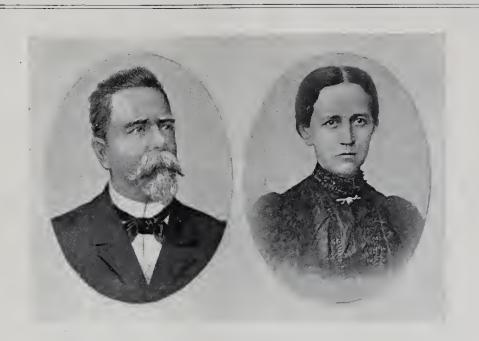
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We present to our readers the portraits of his Excellency, Dr. Manoel Ferraz de Campos Salles, the President-elect of Brazil, and of the Exma. Sra. D. Anna Gabriella de Campos Salles, his wife, who will grace the Palace of the Cattete for the next four years, as the first lady of the land. We regret that recent photographs brought from Brazil were lost; this obliges us to use reprints from European papers which are far from satisfactory.

Dr. Campos Salles was born in Campinas, in 1841. His father, Francisco de Paula Salles, was not as highly educated as his son, but was noted for his rare good sense, intelligence, generous impulses, uprightness of character—public and private—liberal views and sound patriotism.

The President-elect was educated at S. Paulo, took his degree of Bachelor in Law in the usual way and, very early in life, espoused Republican principles; therefore, when the Republic came he naturally went to the front and has been there ever since, putting into practice the theories of government he so ably defended under the Empire.

In the first number of the BULLETIN we gave our views of his ability to hold the reins of government; since then, every phase of his character and life have been discussed in European papers.

In 1865, he married his cousin, Exma. D. Anna Gabriella de Campos Salles, daughter of José de Campos Salles, the well-known veteran Republican.

It would be foreign to our habits and manifestly out of place to enlarge upon the personal qualities of this estimable woman.

We may say, however, that she is not only a representative of the highest virtues of her sex as a wife, a mother, and a member of society, but is possessed of rare firmness of purpose and sagacity, that intuitive knowledge of character only found among women, an intelligent knowledge of her country and its needs, political acumen to an uncommon degree, and great civic courage.

When her distinguished husband, during the critical days of the Republic, found himself hedged about with difficulties and grave dangers, it was D. Anna Gabriella's wise insight into affairs, clear vision and unwavering courage that enabled him to master the situation. Brazil has been remarkably fortunate in the wives of her Presidents, and in none more so than in the Exma. D. Anna Gabriella. In the arduous duties of the palace she will have the efficient support of three charming and accomplished daughters.

COFFEE.

They have in Turkey a drink called coffee. * * * The drink comforteth the brain and heart and helpeth digestion.—*Bacon*,

Little is known of the early history of coffee, though it has been in use for more than 1,000 years. Prior to the 18th century, all the coffee used in Europe was brought from Arabia Felix, via the Levant. This trade was broken up when the vessels of England and Holland doubled the Cape of Good Hope. In 1697, Van Horn introduced coffee into Batavia; from here it was taken to France, and from France to Martinique and the West Indies. In 1754, Fr. Villaso, a Franciscan monk, took a plant to Rio and cultivated it in the garden of the monastery of St. Anthony. The origin of the name is somewhat obscure. It has been said to come from *kahwah*, an Arabic word, but this seems to be somewhat far-fetched, as coffee did not originate in Arabia, and it doubtless had a name when it was brought there. In all probability the word is derived from *Kaffa*, the name of a province in Abyssinia where it is found in a wild state.

The coffee plant belongs to the genus *coffca*, order Rubiceæ, and is related to the Cape Jasmine and *Bouvardis*, and also to the little spring "bluet" of our pastures. Among the many varieties the C. Arabica, the C. Occidentalis and the C. Liberica are the best known. The coffee of commerce is, however, the C. Arabica, though the C. Liberica bid fair a few years ago to become a strong rival because it was better able to resist the leaf disease that was ravaging the East. It was, however, attacked by the disease, and its cultivation in Ceylon was soon abandoned.

Coffee is an evergreen, and usually grows from a single shaft, though it is often seen in Brazil growing in bunches of six or eight slender trunks. It has long, smooth and shining dark green leaves, with fragrant white flowers growing in clusters in the axils of the branches. The berries are formed in clusters varying in number from three to twelve, and have either very short stems or none at all. The fruit when ripe resembles a medium sized ripe cranberry in size, shape and color. Each berry contains two seeds embedded in a yellowish, sweetish pulp. Each seed is shaped like an irregular half sphere, so that, when the two surfaces are together, they form almost a perfect sphere. The pulp is removed by a pulping process, the thin parchment skin is taken off and the berry is polished. When this process is completed we have the coffee of commerce.

Sometimes the berry contains only one seed, the other having failed to develop. This seed is almost round, but retains the central crease common to the perfect seed, and is known as the pea-berry or male berry. Much of the Mocha coffee is of this kind, and the same is found in India and in the Mamamguape region of Brazil. It is also found, to a greater or less extent, in all kinds of coffee, just as imperfect or dwarfed cherries and apples are found on the trees with perfect fruit. This peculiar growth of coffee is screened out in the process of cleaning and sold as a separate grade.

There is no great difference between the varieties, and what there is may be the result of different conditions. The C. Arabica is a shrub from four to eight feet high, with leaves slightly broader than those of the common Brazilian "native." It has from four to six berries in each cluster, and the almost stemless fruit is very liable to fall before ripening. The C. Liberica is a tree from twelve to thirty feet high, having longer, narrower leaves and larger berries formed in clusters, from seven to twelve in number, which remain fast to the limb long after ripening. The "native" Brazilian is also a larger tree than the Mocha, having longer leaves, standing more upright on the branches, with from five to ten short stemmed berries in a cluster.



Picking Coffee.

C. Arabica is a misnomer, for the real home of the shrub is Abyssinia, where it grows wild. The date of its appearance in Arabia is not known, but it has certainly been cultivated there for centuries in the provinces of Yemen and Wady Negram. It was formerly taken from these places to Mocha for shipment, but now goes to Aden. There is no coffee grown in or near Mocha. (I) Nowadays, there is no genuine Mocha coffee, that is, coffee grown in Yemen or Wady Negram, ever found west of Constantinople, because all that is raised is consumed in Syria, Egypt, Arabia and Turkey.

Coffee may be grown anywhere beyond frost line, where the climate is neither too dry nor too moist, as extremes are fatal to its successful growth. It is usually planted on the steep slopes of mountains, 1,000 or more feet above sea level, but it can be profitably grown on lands not more than sixty feet above the sea, and has been successfully grown on the *campos* or plains near Casa-Banca in the State of S. Paulo, Brazil. There is no reason why all the fertile flat lands, that can be properly drained, should not produce coffee.

The trees bear when from three to five years of age. The Bourbon variety,

recently introduced into Brazil, when planted on the rich *terra rova* of West S. Paulo will produce a good crop the third year, while the so-called "Native" will hardly yield a paying crop the fifth year. The Java planted on the same land will yield a good crop the fourth year and a fair one the third year. In good land, when properly treated, a coffee tree will bear for twenty or thirty years, and with pruning and fertilizing it will bear much longer; we have seen trees fifty years.

The average yield from a healthy tree, from five to fifteen years old, is 100 arrobas to 1,000 trees, or 3.2 pounds to a tree; some plantations on the famous *terra roxa*, in favorable years, yield as high as 200 arrobas, or 6.4 pounds to the tree, while many of the old plantations on *massap*é or *mulatto* lands may not have an average of more than 60 arrobas, or a trifle under 2 pounds per tree, this is double what was produced formerly in the Rio zone. (2) When we consider that in many coffee producing countries the yield is a little more than one pound per tree, we can see what immense natural advantages Brazil has.

The rapid decline of coffee planting in the West Indies, and its total failure



Drying Coffee on the Terreiro.

in Ceylon and many other parts of the East, leave Brazil with but few strong competitors. Brazil now produces two-thirds of all the coffee in the world. The first coffee was exported from Brazil in 1809. In 1855, the total amount exported was 3.256,089 bags of 132 pounds each, valued at nearly \$25,000,000. In those days its culture was confined to the eastern Minas, Rio de Janeiro and the banks of the Parahyba, between the Mantigueira and the coast range. It is now raised in at least seven of the states.

In 1874, it was estimated that in all Brazil there were not more than 530,000,000 trees; in the state of S. Paulo and the narrow strip of Southern Minas, tributary to Santos, there are to-day nearly that number; S. Paulo alone has 500,000 trees.

When one reads, in the market reports, the great number of names used to designate the different kinds of coffee, he is confused, but he must remember that these names refer to the place from which the berry is shipped, and that the coffee all belongs practically to the same species, either the C. Liberica or the C. Arabica

For many years the Brazilian Government has spared neither labor nor expense to introduce the best coffee plants in the world into Brazil, free of cost to the planter, and has kept up costly experimental stations for testing them. There are to-day large plantations in S. Paulo where pure Java from imported Java seeds is grown exclusively; there are also many plantations where only Bourbon coffee is produced, and others that raise only Mocha; the Mocha of Serra da Mamamguape is as good as any raised in Arabia.

As a beverage, coffee is valuable for its stimulating influence upon the system; it produces a buoyancy of feeling with no unpleasant reaction, lessens the sense of fatigue, and sustains the body under prolonged muscular strain. It is *par excellence*, the poor man's drink, "the cup that cheers but not inebriates." The active principle upon which coffee depends for its peculiar action is *caffeine* or *theine*, which is also found in tea, *matte*, guarana, and other plants. Its chemical formula is C⁸ H¹⁰ N⁴ O², rather a complex affair. Coffee contains less tannic acid than tea, and does not retard the action of the bowels, or disturb digestion; it refreshes and stimulates, while it retards tissue waste.

High prices stimulate adulteration; various ingredients have been used, among which chicory, carrots, dandeloin roots, barley, buckwheat and corn are the best known; in Brazil, the carnauba nut is mixed with coffee. None of these substances are harmful, and some are really beneficial though they do not contain the essential *caffcine*. Adulterations are only found in ground coffee, though an ingenious fellow, during the recent high prices, counterfeited the green berry by moulding some kind of a mass into the same shape, and flavoring it with coffee extract. At the present low rates of coffee, there is little inducement to adulterate or counterfeit it.

If the seed is roasted to a reddish brown it loses 16 per cent. in weight, and gains 30 per cent. in bulk ; if to a dark brown, the loss in weight is 20 per cent. and the gain in bulk is 50 per cent. In roasting, the percentage of *caffeine* is lessened and the aroma is increased ; the aroma is exceedingly diffusible and volatile, escaping if the coffee is kept long after roasting ; for this reason the roasted coffee of trade is covered with some light substance, such as the white of an egg, pure albumen, to confine the aroma.

In Brazilian homes, where it is the custom to offer a cup of coffee to visitors, the coffee is roasted and ground afresh each time it is served. It is not boiled as in this country, but is reduced to a fine powder and packed in a conical woolen bag; hot water is then poured through it twice, and it is a percolation instead of a decoction, that is served as a delicous cup of coffee.

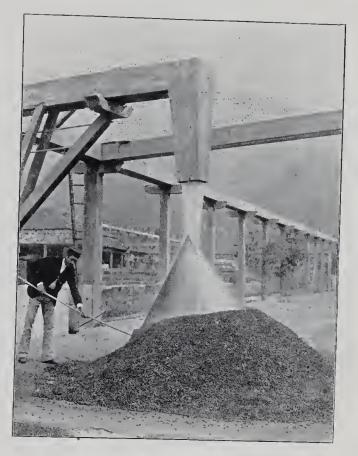
The vast area of inexhaustible red lands of the state of S. Paulo, and immunity from the leaf disease that has detroyed the industry in Ceylon and in many parts of the West Indies, point to that part of Brazil as the great coffee producing centre of the world, with which it will be very difficult to enter into competition. One thing that has operated against Brazilian coffee is the heavy expense of the great *Fazendas*, as compared with the small farm and simple plant of other countries; the lack of care in picking and preparing the berry, and the haste in getting the crop to market have also been most detrimental; it has always been a question of *quantity* rather than *quality*. (3)

Things are bound to change with low prices and competition with foreign capital. Coffee is really the crop which the small farmer can produce best. He can take care of from 2,000 to 10,000 trees, prune, fertilize and keep them clean, pick the berry when ripe and dry the fruit; he can then take it to some neighboring factory where it can be cleaned and made ready for market much cheaper than he can do it himself. Meanwhile, he is cultivating his corn, rice, beans, mandioca and sugar, and raising his cattle and swine.

During the recent high prices of coffee, these staples were all imported, thus

increasing the cost of living, and, consequently, the expense of raising coffee to such a degree, that, when prices went down, the large planter found himself unable to get his crops to market without loss. Under a proper adjustment of things coffee can be produced considerably below the present price, as has been proved by some of the foreign companies, and even at a larger profit than the western American farmer realizes on his corn at 30 cents, or his wheat at 80 cents per bushel.

In former times in Brazil, it was easy to say just when the blossom would come, what effect on the coming crop a frost, a drought, a heavy rain or hail storm would have, also when the bulk of the crop would be marketed, and elaborate statistical tables were made and studied. All that has changed. The area now occupied by coffee is too great to be seriously affected by any local accident or



Washing Coffee.

mishap; the range of latitude is so great, that when the flowers are coming out in one district, the ripe fruit is being gathered in another, so that coffee arrives in market all the year around. (4)

In spite of the great fall in prices, we cannot expect any diminution in coffee planting, rather an increase, as the new planting is more than equivalent to the falling off of the old from decay and old age.

It is a singular fact that, while English and German capital has been attracted to the coffee industry of Brazil, and large sums have been invested, American capital and enterprise have not seen this fine opening, which is particularly attractive to the small farmer, but have been looking up the same thing in the Sandwich Islands and Mexico, where the conditions are far less favorable. For fifty years, coffee planting in Brazil has been the most profitable farming in the world. The unexampled prosperity of the state and city of S. Paulo is a proof The growth of the coffee industry has increased the city from a college of this. town of 20,000 inhabitants, to a cosmopolitan city of 225,000 inhabitants, and has gridironed the state with railways.

To engage in coffee planting on the magnificent scale of the Brazilian Fazendeiro requires a large capital; these great plantations run from 200,000 to 1,000,000 trees, and some of the large companies have several millions of trees. The small farmer, who limits his coffee orchard to 5,000 or 10,000 trees and devotes himself to other crops at the same time, can produce and market his coffee at half the cost of the great planter.

The process of putting out a coffee orchard is very simple for the small farmer. He first clears the virgin forest by cutting down the trees,-he may leave standing some of the most valuable timber by girdling the trees,-this work can be done when other farm work is slack. After giving the trees time to dry thoroughly, he sets fire to them, clears away the unburned brush and lays out the land in squares. All this can be done at an expense of from 70\$000 to 100\$000 per alqueire (6 acres). (On large plantations the minimum cost is 150\$000 for the clearing alone). Holes are dug for the plants or seed, as the case may be, from 8 to 12 feet apart, according to the quality of the land; the richer the land, the farther apart the holes are made. The holes are six to eight inches deep. Some planters prefer to start the plants in a nursery and set them out when a few inches high; others plant the seed,-two or three in each hole. The holes are covered with bark or chips, making a sort of a roof, until the plants are strong enough to stand the hot sun. During the first two years, corn and beans may be planted between the rows, and the expense of cleaning is thus reduced to almost nothing by the value of these side crops, which the small farmer cultivates with his regular help hired by the year; but which the large planter loses altogether, as they belong to the men who clean the coffee trees at so much a thousand. The coffee tree, at bearing age, has cost the small farmer from 500 reis to 1\$000 against the 3\$000 and upwards which they cost the large planter who lets the work out by contract. The small farmer also does the picking, drying and hauling to the mill at a relatively insignificant cost; he ought to produce a better grade of coffee than the great Fazendeiro, because he can take better care of the trees.

On the great plantation, all this is done with an elaborate and expensive plant: the picking is badly done, for the trees are stripped by the men paid by the bushel, and the coffee is pulped, dried and rushed to the market with all speed; because the planter has generally spent the value of the crop, and his agent is in a hurry for his money. The conditions are very similar to those which obtained in the prosperous days of the South, when Cotton was King.

(1) In recent statistics of the coffee trade of Arabia, mention is only made of Aden as the port of shipment. The last available figures show that 54,091 bags of coffee were imported for re-export against a total shipment outward of only 69,870 bags.

(2) In the rich lands of S. Paulo the distance between plants is being increased to 14×14 or even to 18×18 palmos (8 inches). At 16 palmos an Alqueire of 6 acres will hold about 2,400 trees, which one man may attend easily and cultivate his crops of beans, corn, rice, etc. If the yield be 100 arrobas of cleaned coffee to the 1,000 trees the product of one man's work would be 240 arrobas.

would be 240 arrobas. (3) In 1882 the Rio Zone, i. e., the country whose coffee is sent to Rio for shipment—N. E. Minas, N. S. Paulo, Rio, and part of Espirito Santo—had 850,265,450 trees ; while S. Paulo, ZONE, i. e., the country tributary to Santos—all of S. Paulo except the extreme North and a strip of S. Minas—had only 141,279,112 trees. Since then the proportions have changed, the Rio Zone has fallen off and the S. Paulo has increased to more than 500,000,000 trees. The average production in the Rio Zone under the old regime was 333 Grams per tree, while S. Paulo was, even then, 835 Grams. The average is about the same in Rio now ; in S. Paulo it has been greatly increased by better species of coffee and improved culture. (4) Many large planations are changing hands, and coffee is becoming more and more the

(4) Many large planations are changing hands, and coffee is becoming more and more the crop of small silies; this will result undoubtedly in less haste in getting coffee to market.

BRAZIL AND THE UNITED STATES.

A COMPARISON.

Between Brazil and the United States there are many points of resemblance, besides territorial greatness, which are as striking as are the differences, more often noticed. They ran on parallel lines for many years. The date of discovery and settlement coincides ;—both practically began life in the seventeenth century as the colonies of the small but powerful European monarchies, England and Portugal. Had the world been called upon, at that day, to forecast the destinies of Portugal and her South American colony, and England and her North American colony, it might have seemed doubtful to which was reserved the most brilliant future. At that time Portugal was the foremost commercial nation of the world. To history she had given Vasco da Gama and Alburquerque; to literature, a Camoens. She had opened the way to India and held the East in her grasp. She monopolized the trade of India and possessed nearly half of the newly discovered South America. "Lisbon became the storehouse and centre of distribution for the products of the East and attained to a height of wealth and luxury unrivalled since the days of ancient Rome." England was also rich and powerful. tyranny and rapacity of the mother countries drove both of the American colonies to rebel and secure their independence. In love for free institutions and jealousy of interference in their liberties, the people of both Americas are alike to-day. The genius of both is essentially democratic.

Here, unfortunately, the parallelism stops, the lines diverge, and it would be difficult to find countries in stronger contrast than England and Portugal, North and South America.

Portugal has lost her power, and her rich possessions have shrunk until she is least among the nations. In her internal life she is still back in the seventeenth century, and in her finances she is practically a ward of England. England, on the other hand, has, in the same space of time, extended her empire around the world, her flag is on every sea and the products of her industries are everywhere. She is the world's banker, her colonies are centres of civilization and light and she has become the mother of nations.

Brazil was hoodwinked into accepting a *pseudo* independence, was handicapped by the traditions and defects of the mother country, from which most of her emigration came, and was held back for nearly eighty years, until she again rebelled and secured a true independence. She starts late in the race, still heavily handicapped, but will, we believe, win in due time.

The United States, under the impulse and in the spirit of free institutions, has outgrown most of the monarchies of Europe in all the elements of strength and prosperity.

As the United States has benefitted from the reflex influence of the mother country, so Brazil has suffered.

It is not necessary to speculate upon the causes of this remarkable difference. They are neither accidental nor numerous.

It was not a question of race nor opportunity with Portugal,—both were in her favor. History has pronounced the verdict. The same cause produced the same results elsewhere. Portugal is not alone in representing a phase of life out of which England passed two centuries ago. The atrophy or her moral, intellectual and political powers is only more noticeable because more symmetrical and complete than that of Spain. Her people are industrious and peaceable. Why do they not prosper ?

The obvious and controlling force is religion. Protestant nations have a life

and vigor not found in any people wholly under the sway of modern Rome. This is nowhere better seen than in the United States, where Protestantism has been able, by simple contact with, and under the protection of free institutions, to elevate the Roman church and revive in it the smouldering embers of spiritual life, until it is to-day the strongest and purest representative of Roman Catholic Christianity in the world. We have no question with the sincere Roman Catholic who lives up to his light,—we have many old and dear friends among them,—our contention is for the principle of freedom of conscience and vital Christianity, which Protestantism represents, as opposed to an oppressive ecclesiastical machine, subversive of both liberty of conscience and freedom of action.

The heritage which Spain and Portugal left their South American colonies under papal rule, was priestly tyranny and corruption, ignorance of the masses and illegitimacy; defective morality, superstition, bigotry or open unbelief; external forms of religion degenerated into downright idolatory; chronic revolution and bankruptcy.

Great Britain bequeathed to her North American colony liberty of conscience and action; education of the people, pure Christian family life, morality, woman elevated and respected; a deep rooted religious sense and a strong conviction of individual responsibility; happiness and *prosperity*.

Rome fights for mediæval intolerance, magnifying the externals, but disregarding life and conscience. Protestantism stands for absolute liberty of conscience, a clean Christian life with little regard for externals. Rome lets mariolatry and saint worship supersede Christianity; creeds and dogmas are magnified, religion is made a compact, a transaction; spiritual life and personal service are minimized. Protestantism takes the word of God, and wants no priestly interpretation. It stands for Christ alone.

Concerning Romanism in Brazil, a writer, whose friendship and impartiality cannot be questioned, says : "What strikes one regarding the religious condition "of Brazil is the almost total absence of religion. In this respect it is strangely "unlike other thoroughly Roman Catholic countries. Not only has religion "degenerated from being a thing of conviction to a mere habit, but it has "become a habit to pay no attention to its outward forms even. Few attend "church or confess."

The transformation of a nation can only be accomplished by the transformation of the individual. The power to transform the individual is found only in the New Testament of Jesus Christ, undiluted by human error.

HOW PORTUGAL LOST THE PHILPIPINES.

Early in the 11th century Prince Henry, "the Navigator," of Portugal, obtained from Pope Eugenius IV, a Bull which gave to Portugal all discoveries between Cape Hun, in Morocco, and India. In 1472 St. Thomas, Annobon and Prince's Islands were added. When the equator was passed and Fernando Po gave his name to an island in the Bight of Biefra, he seized 500 leagues* of the African coast and the King of Portugal took the title of "Lord of Guinea."

Very early in the days of discovery and conquest, towards the end of the 15th century, the most catholic sovereigns of Spain, Ferdinand and Isabella, and his

^{*} $17\frac{1}{2}$ degrees were reckoned as a league.

equally catholic Majesty, John II of Portugal, fell out about the ownership of the land yet to be discovered.

Like faithful children of the Church, they referred the whole matter to the Holy Father at Rome, Pope Alexander VI, a Spaniard, who cut the gordian knot by, giving them the earth, and setting the limits of their respective possessions. An imaginary line was to be drawn from pole to pole, 100 degrees west of the Azores or the Cape de Verde Islands; all west of this line was to belong to Spain, and all east of it to Portugal. King John was not satisfied, and the Treaty of Tordeselhas was made in 1494, giving to Portugal all lands east of an imaginary line drawn 360 leagues from the most western point of Cape de Verde Islands and all south of the Cape of Good Hope. To Spain was allotted all lands west of this line, ignoring completely all other nations.

Fernão de Magalhães, or, as we write it, Ferdinand Magellan, and Ruy Faleiro, both Portuguese subjects, who had differences with their king on account of some petty pensions, offered their services to Spain. Both had served two years with Albuquerque, and knew all about the Portuguese possessions in the East.

Magellan represented to Charles V, who then ruled over Spain, that he was sure the world was round, a theory then credited by few. He declared his ability to find a shorter passage to the East than any known to the Portuguese, and would prove that the Moluccas, rich spice islands, were within Spanish territory. Charles V had a small fleet fitted out and sent Magellan with his companion in charge, well equipped for those days. He went south against the express stipulations of the treaty, and discovered the straits which bear his name. His fleet crossed the broad Southern ocean, passed the Ladrones and the then unknown Philippines, inspected the Moluccas, and returned by way of Cape of Good Hope.

Magellan lost his life, and out of the five vessels which comprised his fleet, only one returned under the command of Sebastian del Cano, who brought Magellan's written report of the expedition and a map of the route, showing that all of the spice islands and the whole of the Indian Ocean were within the 180 degrees belonging to Spain under the treaty of Tordeselhas. In the map Magellan had deliberately cut out 40 degrees of longitude and brought the whole archipelago within Spain's half of the world. He concealed the fact that the number of miles in a degree of longitude decreases towards the pole.

Portugal protested and declared war, which continued two years, when the celebrated "Congress of Notabilities" was held in a small frontier town to discuss the matter and discover the real facts. Portugal was at a manifest disadvantage. Magellan was the first and only man who had sailed around the world, and his map of the southern seas was the only document extant. Spain refused to give up her alleged rights, and Portugal held on to the islands. The matter was finally compromised by an indemnity of 350,000 cruzados of the gold of Molucca, which Portugal paid to Spain for the supposed $17\frac{1}{2}$ degrees of Spanish sea which she held. A new line was drawn from pole to pole, starting from the Ladrones. This division gave to Portugal all west and south of the line, which was supposed to be 180 degrees from the other line drawn, 360 leagues west of Cape de Verde. This treaty was approved by Pope Julian II in the Bull: *Ea quæ pro bono pacis*, and the matter was settled.

Years afterwards a Spanish expedition discovered the Philippines, so named after Philip II, who was then King of Spain. These islands, though many degrees within Portugal's line, were taken possession of by Spain. Portugal protested, and would, undoubtedly, have obtained possession of them had it not been for the disaster to the Portuguese arms in Africa, which threw Portugal into the hands of Spain, where she remained for sixty years. This period is known in Portuguese history as the "Sixty Years of Captivity."

[†] See this map in the History de las Indian Orientaes, by Herrera.

When Portugal finally regained her independence she was much weakened, and was more interested in settling the boundaries north and south of her valuable South American colonies; so the Philippines remained with Spain through lackes rather than by right. Had Portugal retained them it is more than likely that they, like many other of her Eastern possessions, would have fallen into the hands of the English, and their whole history would have been changed.

THE CRY OF THE LOST SOUL.

We venture to reproduce this plaintive poem by Whittier, because of its distinctively tropical color. We have felt "The Solitude of Earth that overawes" along the shores of the great inland sea, and are familiar with the cry of the bird, heard in the night, which the Indians call A Alma Perdida, The Lost Soul.

Among the numerous translations of this poem is one by the late Emperor of Brazil, D. Pedro II., a warm admirer of Whittier.

In that black forest, where, when day is done, With a snake's stillness glides the Amazon Darkly from sunset to the rising sun, A cry, as of the pained heart of the wood, The long, despairing moan of solitude And darkness and the absence of all good, Startles the traveller, with a sound so drear, So full of hopeless agony and fear, His heart stands still and listens like his ear. The guide, as if he heard the dead-bell toll, Starts, drops his oar against the gunwale's thole, Crosses himself, and whispers, "A Lost Soul!" "No, Senhor, not a bird. I know it well,-It is the pained soul of some infidel Or cursed heretic that cries from hell. " Poor fool! with hope still mocking his despair, He wanders, shrieking on the midnight air • For human pity and for Christian prayer. "Saints strike him dumb! Our Holy Mother hath No prayer for him who, sinning unto death, Burns always in the furnace of God's wrath!" Thus to the baptized pagan's cruel lie, Lending new horror to that mournful cry, The voyager listens, making no reply. Dim burns the boat lamp: shadows deepen round, From giant trees with snake-like creepers wound, And the black water glides without a sound. But in the traveller's heart a secret sense Of nature plastic to benign intents, And an Eternal Good in Providence, Lifts to the starry calm of heaven his eyes; And lo! rebuking all earth's ominous cries, The cross of pardon lights the tropic skies! " Father of all!" he urges his strong plea, "Thou lovest all: thy erring child may be Lost to himself, but never lost to Thee! "All souls are Thine; the wings of morning bear None from that Presence which is everywhere, Nor hell itself can hide, for Thou art there. "Through sins of sense, perversities of will, Through doubt and pain, thro' guilt and shame and ill, Thy pitying eye is on Thy creature still. "Wilt Thou not make, Eternal Source and Goal! In Thy long years, life's broken circle whole, And change to praise the cry of a lost soul?" - Whittier.

BRAZILIAN WOMEN.

It has been alleged of India and China, as well as of France, England and the United States, that the condition and future prospects of a country can be determined, with a fair degree of accuracy, by the condition and character of its women. If this be true of Brazil—and it undoubtedly is—then the Brazilian people rank high among the nations, in this respect, and Brazil has before her great possibilities.

Any one familiar with Brazilian home life (your peripatetic traveller never gets a glimpse of it) knows the vast superiority of the women over the men, in all that goes to make character. About all the religious sentiment which 400 years of Jesuit education has left in the country is found among women, and if ever Roman Catholicism is to be lifted and purified, as it must be to *live* under free institutions, it will be through women.

The writer has known scores of women, both in the large cities and in the interior, whose purity of life, high ideals of virtue and strength of character gave them an influence for good that has far outweighed the corrupting power of a score of vicious, frivolous men. We have seen the mansions of great plantations, whose internal affairs were complex and difficult, presided over with wonderful grace, tact, dignity and efficiency by the lady of the house, whose authority was unquestioned in all domestic affairs, whether relating to numerous servants—in old times, slaves—the family government or the entertainment of guests. The delightful and open-hearted hospitality for which the Brazilian home is noted is the work of her hands. It was not always so.

Brazil inherited from Portugal a social system which regarded woman as a mere incident in man's affairs; an appendix, a pleasant device for his gratification and use, a necessary and perhaps wise enough provision for perpetuating the race, but always subordinate and inferior. Man, under the old regime, was lord and master, disposing of his daughters in marriage as business interest or convenience dictated. The wife was in complete subjection, and the females of the family were guarded with Turkish jealousy. If any degree of deference or respect was shown woman, it did not grow out of a recognition of her rights or an elevated conception of her character, but rather a regard for the rights of some man to her and her services. In old colonial times she can hardly be said to have had a separate existence. After separation from Portugal the condition of woman began to improve. Still, less than three decades ago, it was a common thing for men to lock their wives and daughters securely in the upper story of the house when they went to business, or if they were to be absent any length of time to deliver them to a convent for safe keeping.

No respectable woman could go alone on the streets of any of the large towns. A visitor needed to be on terms of closest intimacy with the husband to be presented to wife or daughter.

The esteem in which woman is held can be seen best by the position she occupies in the literature of the country. It is filled with an exaggerated, sensuous and impure exaltation of "the fair *sex*" to the exclusion of almost every other theme. It is her person chiefly, rather than her character, the romantic and sentimental side, exalting the emotions and feelings rather than her intelligence and moral worth. Nowhere in literature do we find any high conception of true womanhood—this perverted, sensual regard for women has been most pernicious in its effects upon society. There is among men in all ranks of society, young and old alike, a morbid condition of mind and feelings which excludes the nobler and purer sentiments, prevents a proper conception of womanly worth and dignity —taints social life and kills all true respect.

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All this has been changed in New Brazil and the "woman question" has come to the front; already we have several women's journals; she has invaded literature, business and professional life, and has entered many of the walks of life supposed to belong exclusively to men.

EDUCATION OF WOMEN.

In discussing the "Woman Question," the first query is, "How is she to be educated?" Objection has been made to co-education on the ground that contact with the coarser male element would rob the young girl of some of the delicacy which is her peculiar charm. It is singular that the same objection is never made to the association of brothers and sisters in the same family! After an experience of nearly thirty years, during which we have dared to ignore sex, color and nationality, we can testify that the effect of co-education has been to give better poise and greater strength of character to the girl, without in the least degree lessening the feminine grace of her character; and to devolp in the boy finer qualities of gentleness and courtesy, and higher respect for womanly virtue.

WHAT IS BEING DONE.

We draw no line that we could not draw in religious teaching. Education is the right of the individual, and it is our duty to the individual to provide it regardless of the incidents of color, sex or social condition. Our boarding schools, where sex is an element obliging us to a differentiated regime, are accidents, appendices to the school proper, subordinate and transitory. They represent the home for the time being, and are not considered in a plan of education.

If the advantages of a liberal education are to be extended to the women of Brazil, it must be on this plan. The future may develop something better. We have earned the support of all classes of Brazilian society. The daughters

of many of the high dignitaries of the land, under the old, and the present regime, including Governors and Presidents, have been among our pupils.

We propose to carry this principle of co-education into every department of our work, whether Kindergarten, Grammar, High, Normal or Industrial Schools, or the College and University courses. This is from an educational standpoint; from a religious point of view it is still more important.

While it is true that one of the most promising and powerful agencies at work in the Protestant churches of Brazil is the devoted Brazilian woman, whose life has been broadened by Evangelical truth, and whose intelligence has been quickened by Protestant teaching, it is also true that the greatest obstacle to the advance of Christian truth is found in those women who have been educated by the "sisters" into blind obedience and unthinking devotion to Rome. Hence it is that not only the advancement of the nation in true civilization, but the hope of Protestant Christianity in Brazil and the elevation and purification of Roman Catholic Christianity itself, depends largely upon what is done to educate and elevate woman.

The intelligent patriotic women of Brazil who are aware of this movement to extend our educational system to College and University work, know how much it means for them, and are watching it with mingled hope and anxiety. It means to them the opening of the way to higher education on terms of equality, enabling them to compel respect, and also to demand that the recognition of their right be considered in the reorganization of society. It means greater purity in the family, greater purity in the Nation, and a wider sphere for women's usefulness in every direction.

THE FIRST AMERICAN REPUBLIC.

It is not generally known that in the early part of the Sixteenth Century an independent government was set up in South America, with no declared purpose of forming a republic, but with the idea of establishing a free popular government. Some writers have spoken of it as the Republic of S. Paulo, others, as the Republic of St. André.

It is true that there was, to all intents and purposes, a republic on the uplands of S. Paulo from 1536, soon after Martin Affonso took possession of the country, until the accession of the Braganzas, in 1640, a period of more than one hundred years.

At the time, when the Portuguese expedition under the great Martin Affonso reached St. Vincent, the territory now belonging to the State of S. Paulo was peopled by numerous powerful tribes of Indians. The Carajós, the Tupys, the Itanhaens and other tribes on the coast were under the Chief Cauby, "Master of Jerybatuba," who was in some way subordinate to the head chief, Teberyçá; this chief was practically king of the confederation of the Guanazes, a powerful and warlike tribe inhabiting the plateaux above and beyond the Serra.



S. Francisco Square, S. Paulo.

On hearing of the arrival of the white foreigners on the coast of his dominions, Teberyçà called out a strong force of warriors and descended the mountains to expel them.

At this point, we have the most singular and romantic episode of the history of those days. It appears that two Portuguese sailors reached this part of Brazil; they had either deserted from some of the early expeditions which visited the coast from 1501 to 1520, or had been exiled; at all events, they were important personages domiciled among the Indians, and speaking their language. One of them, Antonio Rodrigues, had married a daughter of Piqueroby, chief of the Ururays; the other, John Ramalho, the more intelligent of the two, had married Princess Batyra, afterwards baptized as Isabel, the beautiful daughter of the *Regulo* Teberycá; from this union sprung some of the most important families of the state. He was the confidential adviser of his father-in-law; when he reached the coast with the war expedition and learned that the new-comers were Portuguese, he hailed them with delight and easily persuaded Teberyçá to become their friend and ally; this compact was observed religiously by the Indian chief as long as he lived.

Soon after Martin Affonso, accompanied by John Ramalho, visited the upper country and formally recognized the authority of Ramalho over the territory occupied by him and Teberyçá. This was the beginning of the republic. Some twenty years afterwards, the settlement of St. Audré, which had become a populous centre, and the headquarters of Ramalho and his followers, was officially recognized by the colonial government.

From this time there were three distinct classes in the colony. I. The pure white Portuguese, men of authority and official standing. 2. The mixed Indo-Portuguese or Mamelukes, a new race formed by the inter-marrying of Portuguese colonists with the Indians. This was a powerful class following the leadership of Ramalho, and recognizing no other authority. 3. The pure Indians who were the victims of both the whites and the Mamelukes, or half-breeds. Singularly enough, there was a bitter feeling between the Mamelukes and the full-blood Indians; the former were cruel and relentless persecutors of the Indians whom they captured and reduced to slavery.

Ramalho's republic was a quasi military establishment,—hence the name Mameluke, from a supposed resemblance to the eastern Mamelukes in their military organization.

Southy says: "This mixture produced an improved race,—the spirit of European enterprise developed itself in a constitution adapted to the country." It is more than likely that this free and popular government produced the same fruits here as it has in every other country.

A quarrel arose between the Paulistas and the Jesuits, who, to their honor be it said, opposed the enslaving of the Indians, and appealed to the Pope for a Bull against it. A Bull was issued, but, in spite of it, they continued to capture and reduce to slavery all the Indians they could find. The whites, whose chief wealth was slaves, made common cause with Ramalho and his Mamelukes; a regular trade was established with other parts of the country, exchanging Indian slaves for gold and merchandise. A powerful expedition went forth against the great settlement of the Spanish, known as the empire of Guayra, where more than 100,000 Indians had submitted to Spanish rule. The place was utterly destroyed and the Paulistas brought back 60,000 captives, who were divided between Santos and S. Paulo.

They soon attacked the Jesuit mission, killed the leader, expelled the remainder from the colony, and captured 2,000 Indians. For this they were excommunicated by the Pope, but they seemed to care little for either the Pope or the King. The interference with the African slave trade by the Dutch war increased the value of Indian slaves, and the Paulista Bandeirantes traversed every part of Brazil in pursuit of slaves and gold.

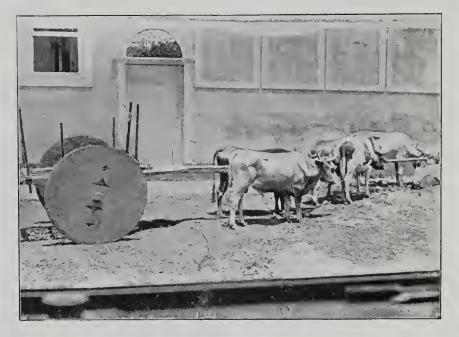
They refused to accept Spanish rule when Portugal lost her independence, and when it was restored under the Braganzas, they refused to accept their old rulers and actually elected a ruler of their own, one Bueno, who, however, declined the honor, and induced them to give allegiance to John IV. of Portugal.

The republic declined, without its originators having suspected that they had founded one, but the old spirit of restless independence and enterprise remains in the modern Paulistas, and makes them the foremost statesmen in the country and their state the most powerful and progressive part of the republic of to-day.

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BRAZILIAN REMINISCENCES.

The experiences of a lone woman traveling beyond the railway belt are unique and varied. We have followed such in Japan, Thibet and South Africa with lively interest. Brazil has seen a similar phenomenon. Fancy an Ohio woman, who has scarcely ever mounted a horse, committing herself to a Brazilian mule, which, to her inexperience, seems as truly an air-ship as ever the queer desert camel. Before she feels fairly accustomed to the duck-like swaying from side to side, heavy rain begins to fall, and her escort, in a matter-of-fact tone, suggests raising an umbrella. Can she hold it and yet cling to the saddle? Will not the strange beast race off with her, in a frenzy of fear, to the ends of the earth if he chance to perceive this shadowy dome above him? She experiments, and yet lives to tell the tale ! At night they reach the scant home of an industrious German. A grocery some eight feet square and a living room two or three times as large are taxed to entertain the strangers. An appetizing hot supper is pre-



Primitive Ox-Cart of Brazil.

pared, and the one glass is offered first to the lady. About nine o'clock all seek rest. The old farmer and his grown son in one great four-poster, between two feather beds; the frau and her fair daughter in another, the American lady in a third, and the missionary escort on a cane-seat sofa near, with his sixteen-year old attendant on the floor. One dog, two cats, two parrots are supplemented by hens and chickens under each bed, which often peep drowsily or with some show of temper; and from under the house come occasional grunts. At about 4 A. M. the American woman, bethinking her of the early start anticipated, begins to fumble about for the hairpins which have strayed during the night. A short bark from the dog dismays her and causes a speedy suspension of her energies. She is equally unacquainted with the nature of a dog and fears that his idea of duty may include pouncing upon any disturbing stranger who bestirs herself in the darkness. Their way sometimes lies through shady forests where gorgeous orchids and parasites or graceful blossoming creepers delight the traveler. Once they enter upon a beautiful green plain following a black, muddy road through the centre. The missionary tells her that the brilliant green hides a treacherous morass, where one may sink out of sight. He goes ahead, the attendant follows with the baggage mule, and the lady is suddenly appalled by seeing her beast balk and look apprehensively at the black mud. Will he decide to leave this pitfall and rush, in preference, to the green pastures to meet a horrid death? She calls for aid, and a few smart cuts on her mule's haunches resolve him to follow the black road thus insistently recommended.

One day a great train of pack mules appears in squads, and they push rudely against her until she is taught by her companions to brandish her whip some time before the foremost reaches her. If he turns out, the rest will follow the lead of his bell.

She has sometimes traveled in a troly, a very light wagon, often drawn by four horses. In places the road passes through a cutting frightfully washed by the rains, so that the right wheels are two feet higher than the left.

or the way leads over a plain where the horses dash along the smooth ground in a style suggestive of frequent overturns caused by so light a vehicle, at such speed, meeting any small obstacle.

One rainy afternoon the mud was so deep and the horses so tired that the four passengers had often to jump out and walk. The poor animals were exhausted. Their blinders were turned back, and fear gave them a factitious energy. A passenger took the lines and whacked the horses with his umbrella, while the driver ran by their side shouting like a maniac and beating them with his whip. One horse gives up, is left behind in the gathering twilight; then another, and at last the passengers stumble through rain and sticky mud and darkness for a mile to the nearest shelter, a small house with a floor of beaten earth and a great fire glowing in the centre. Some merry making was going on. But all were most hospitable. Wet shoes were dragged off and filled with corn to keep them from shrinking while drying. The good mother told us how that many a time she had slept with a canoe fastened to her bed, so that if the little stream some twenty feet below her house should suddenly become a great torrent, she might safely drift off, as she did one night, to a ranch on the other side, where she stayed for eight days.

Hospitable, frank and cordial is the rule in the interior of Brazil.

M. P. D.

THE GENESIS OF THE DIAMOND.

There has been considerable discussion among scientists as to the true character and original position of the rocks from which the diamond is derived. The great majority of the gems lie in river beds far from their original surroundings. A notable exception is that of the Kimberley mines, where the diamond is evidently associated genetically with eruptive rock.

We have before us an able paper by Prof. Orville A. Derby setting forth some interesting facts about the Brazilian diamond fields, which seem greatly at variance with the observations of scientists in Africa.

The only Brazilian mine in which basic eruptives form a characteristic feature is the Agua Suja; this deposit is a bed, however, not a volcanic neck. There is as yet no direct evidence that the eruptive elements have anything to do with the diamond. If, as some scientists believe, the diamond is the product of metamorphic action on carbon-bearing rocks, and not an element of eruptive rock

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itself, the Kimberley and Agua Suja mines would present phases of the same phenomenon of contact with metamorphism.

The oldest and best known of Brazilian diamond fields is that of Diamantina, in Minas Geraes, where the diamond is found within the quartzose rock, known as itacolumite; this rock exists in two types, the schistose and the massive. The predominance of the massive type led to the hypothesis of a genetic relation between this form of the rock and the diamond. This view had become deeply rooted in mineralogical literature, diamonds having been actually discovered in this rock, in Grāo Mogul, about a hundred miles north of Diamantina.

Professor Derby shows conclusively that the two types of itacolumite are of independent formation; that the massive type rests upon a lower series to which the schistose belongs, and contains elements derived from it, the diamond probably being one of them, and that the schistose type is plainly of clastic origin, that is, composed of material broken from various sources and then welded together.



Primitive Diamond Washing.

For the question of genesis, the most significant of Brazilian localities as San João da Chapada, near Diamantina. The material exposed in these mines is a soft soapy clay. In the whole extension of this immense cutting, nothing approaching the gravel which usually characterizes a diamond mine is to be seen, and with the exception of quartz veins, it is difficult to find a specimen which will resist the pressure of the fingers. This clay is a decomposition product of schistose rocks, the original type being horn-blende. The diamonds are limited to three streaks or layers, the highest lode being the richest. It is characterized by a dryer clay, silica, a trace of copper, of iron cement and of *canga* in small pieces. Where specular iron is in large pieces and abundant, the rock is rich in gems. In the middle lode the feldspathic clay is stiff and sandy, marbled with a fat, bluish muddy marl. In the lowest formation the clay contains but little sand, and is much stained.

The diamonds of this region are easily distinguished from those of rolled deposits by their rugose faces, sharp angles and superficial, greenish blue coloration.

All geologists who have studied this region agree that the characteristic formation is a great series of phyllites, itacolumite, iron mica schists and limestone and that this series constitutes a geological unit. The presence of zircous in the San João de Chapada mine proves the clastic origin of the greater part of the original rock types from which the clay is derived.

Prof. Derby concludes that the bottom lode is a vien of pegmatite, a species of granite, with arabesque tracing, associated with the phenomena of contact metamorphism; that the middle lode was originally a bed of sandy ferruginous shale, rather than a vein, and that the highest lode is similar in origin to the first. He decides that the various clays of the Chapada mine represent an original group of phyllites, principally of clastic origin, threaded with veins of pegmatite.

Pegmatite is quite common in Brazil; the rock known as *gabbro* occurs in the diamond region. It is hinted that the supposed pegmatite may be an off-shoot of this basic rock. Whether the pegmatites are eruptive or secretionary in their nature has long been under discussion. Prof. Derby says that the hypothesis of eruptive origin is by far the more probable. The problem as to whether the diamond occurs at San João da Chapada exclusively in the pegmatite bodies, in the contact zone of said bodies, in layers of phyllites more or less removed from such contact zones, or in all, is as yet unsolved, owing to a lack of sufficient data, only obtainable by extensive field work.

data, only obtainable by extensive herd work. The most plausible hypothesis seems to be that the diamond was formed in the phyllites, the presumptive agent being the supposed eruptive, which in some of its phases presents a pegmatitic character.

The facts discussed above do not require more than one mode of genesis for the diamond of Brazil. If we assume that the diamonds at Grão Mogul may be traced to original deposits similar to those at San João, and that at Agua Suja they come from the underlying schists, the phenomena of the three localities are brought into line. If on the other hand it can be proved at Agua Suja that the diamonds are genetically related to the eruptive series, we must conclude that the predominant factor in the genesis of the diamond is an eruptive rock, which may vary greatly in its mineralogical character and mode of occurrence.

The resemblances between Kimberley and San João da Chapada are extremely slight. At the former place a remote analogy may be found in the presence of a quartzite mingled with metamorphic schists in the lower levels. Another analogy, is the existence of tourmaline and disthene apparently formed by metamorphic action about enclosed fragments of schist. Disthene is not especially a characteristic mineral at San João, but is very abundant in the schist series, in which the mine is excavated, and is a constant associate of the diamond in the Brazilian alluvial washings. Its persistent association with the diamond may signify a metamorphism, by contact or otherwise, of argillaceous rocks. But in Africa and Brazil there are still many obscure points which must be cleared up before satisfactory comparison can be made. Should further workings at Kimberly prove the necessity there of an ultra basic type of eruptive rock, brecciated structure, and slot-like mode of occurrence another explanation must be found for the origin of Brazilian diamonds.

Diamonds were discovered in Brazil in 1728, and from that time until quite recently the mines of Minas Geraes produced most of the diamonds of commerce. At present the great fields of South Africa monopolize the world's market and the industry languishes in Brazil.

There is a considerable exportation of *black diamonds* from Bahia, and a few fine ones. The black diamonds answer for mechanical appliances and not for ornament.

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THE INDIANS OF BRAZIL.

There is no bright side to the history of the indigenous peoples of North or South America—no pleasant line of approach to the subject. It is the same story everywhere, of cruelty and relentless crowding out, whether it be of the Spaniard in Peru, Mexico and Florida; the English, French and Americans in North America, or the Portuguese in Brazil. There are variations in the processes, but the march and the inevitable result are the same. Who has not felt his blood tingle with shame and indignation on reading Prescott's Conquest of Peru, the story of Mexico, or Helen Hunt's Century of Dishonor? Only a few years ago the killing of an Indian was a trifling matter in our own Christian America. In Brazil, within a decade, the *Bugre* was hunted as we would hunt any wild animal of the forest.



A Group of Tame Guaranys

There is little authentic information concerning the early tribes of Indians in Brazil; the numerous timid and submissive natives inhabiting the coast region were ruthlessly reduced to slavery, worn out and utterly destroyed, leaving no trace (fortunately, perhaps) behind them; the stronger and more warlike races of the uplands were hunted down, captured, killed or driven into the wilderness, where their identity has been lost. It is estimated that more than three millions were destroyed during the first century and a half of Portuguese occupation. The early Paulistas represented to the Pope that the Indians were not real men and women capable of being made Christians, but only fit for slaves. The Jesuit fathers made a strong fight for the poor Indian, and in the end won, but paid dearly for it. It has been said that under them they were also slaves, but it was, at all events, a milder form of slavery, and one to which the victim did not object.

There are great nations and tribes still occupying the central plateaux and the country about the headwaters and along the banks of the great rivers, living in primitive savagery, as yet untouched by the white man's civilization.

Nearly all the information we have of the Indians in the early colonial times comes to us from the Jesuits. The quaint and valuable account of them in the Purchas Collection of the British Museum, was taken from a Jesuit priest, Fernão Cardim, who was captured by Capt. Francis Cook when on his way back to Brazil from Rome. Wonderful stories are told by Simon de Vasconcellos of the habits and characteristics of the Indians of the great unexplored interior, with whom the Jesuit missionaries came in contact. We are told, with all gravity, of a tribe having caudal appendages of considerable length, as if the missing link had been discovered, etc., etc.

On approaching the study of the races and languages of the eastern slope of South America, one is oppressed by a sense of confusion and unreliability in the great mass of disconnected facts and theories which has been accumulating for centuries, with no attempt at coördination or arrangement. The very names of the tribes, their languages and their habitat are a confused jumble. The Frenchman writes an Indian word according to the peculiar sound-value of his own language; the German and Englishman do the same, so that a single word appears to be three separate vocables. There are several very capable modern observers, but their work has been done on independent lines, and no attempt has ever been made to collect all that has been written on the subject and give it a definite form. Among modern writers on Brazilian Indians none has had better opportunities or has done more connected or trustworthy work than General Couto de Magalhães, a Brazilian scholar, who was president of the provinces of Matto Grosso and Parà, and who spent years among the different tribes of Indians of those regions and learned to speak their language fluently. His work, "O Selvagem," is an authority on the language and customs of the "Savage" of Brazil.

We cannot do better than to begin the series of papers on the Indians of Brazil, which we propose to print in the BULLETIN, with a synopsis of his address before the Anchieta tri-centennial congress, held in S. Paulo March, 1897. We shall condense and translate very freely.

"What is first noticed by the foreigner, on landing in a new country, is the language of the people. A stranger, arriving in Brazil and hearing the sonorous language of the Camoens and Alencar, would at once conclude that he was in a Portuguese country; but had he touched these shores 400 years ago, anywhere between Iguassú (the river La Plata of to-day) and Paraná-Pitanga (the Indian name of the Amazon) he would have heard a language as different from Portu guese as that is different from German or Japanese. In 1560, Joseph Anchieta's salutation in *nheengatú* would have been: '*Tupã omogaraiba yawé ara catie omeehê peeme*,' 'God bless you and give you peaceful times.'

"The name by which the coast region was known to the Indians, prior to the arrival of the Portuguese, was Pindorama, which means—the region of the palms; while the great interior was called Tapuyrama, or the region of the *ranches*, *cabins* or *villages*.

"The entire coast, from the Amazon to the Lagoa dos Patos, was peopled by the Tupy-Guaranis, not under a single government, but as numerous separate tribes, speaking different dialects and often in bitter warfare with each other. The Tupy and Guarany languages are so nearly alike as to be practically one tongue. This race also peopled many parts of the interior.

"The earliest descriptions we have of the people of Brazil are: A voluminous letter from the scrivener of Cabral's fleet, Pedro Vaz Caminho, to D. Manoel, then king of Portugal, written in 1500; a descriptive treatise of Brazil, written by Gabriel S. de Souza in 1587; the history of Brazil by Pero de Magalhães Gondavo, written in 1585; the account of the frair Vincent Salvador, written in 1527; the quaint and rare account by Fernão Cardim, found in the Purchas collection.



A Botocudo Woman.

"We have also a description written by the French Huguenot, Lery, from *Nheteroya*, in 1557, and that of the.French frairs, Abbeville and d'Evreux, in 1540. Among the modern writers we have: Von Martius, Humboldt, Von den Steinen and a long list of others, to be found in vol. 8 of the Annals of the Public Library of Rio de Janeiro.

"The indigenous people of Brazil may be roughly divided into two great classes: those who cooked their food in earthen vessels, made by themselves, and those who had no cooking utensils and only roasted their food before the fire. Among the latter may be found the Cahiapos and the Gorotirés.

In 1587, when Gabriel de Souza wrote his description of Frei Jabotâo's work, the "*Novo orbe Serafico*," the following tribes were described :

1.—The *Tapuyas*, from the Amazon to the Jaguaribe, holding about 200 leagues of coast.

2.—The *Potiguáras*, from the Jaguaribe to the Parahyba (North) about 100 leagues. They belong to the Tupy nation and the name,

Potiguára, simply means "eaters of shrimps"; while the term Tapuya is applied to the scattered hordes of the interior, who do not belong to the great Tupy-Gaurany nation and do not speak the "Lingua geral;" literally the name means "hut dwellers." (I) 3.—The Cayeté, also Tupys, inhabiting the coast from the Parahyba to the

3.—The *Cayeté*, also Tupys, inhabiting the coast from the Parahyba to the S. Francisco, about 100 leagues. Caeté, or Caaete, means the real forest. This was a powerful, warlike tribe, having canoes of a special build. They were completely exterminated.

4.- The *Tupinambás*, also Tupys, from the S. Francisco to the Southern shore of the Bay of All Saints, about 130 leagues of coast.

There has been a great deal of discussion about the real meaning of this word; those best versed in the *Abañecga*, hold it to be derived from tub-yba-ni-mbya, meaning "people belonging to the chief of the *fathers* or *old men*. The term

⁽¹⁾ We have made use of the notes of Dr. Baptista Caetano, found in "Fernão Cardim," to describe the various tribes not included in Gen. Magalhães address.

Tupy was not originally used to designate a particular tribe or nation, but meaning *old*, *uncle*, *chief*, etc., was applied to those tribes or nations recognizing the authority of a chief or of old men.

5.— Tupinakis, from the southern shore of the Bay of All Saints to a point 70 leagues South. The word has been variously interpreted; the accepted meaning

6.—The Papanás, also Tupys, holding the coast south of the Tupinakis, being Tupis neighbors.

afterwards conquered by the Aimorés. 7.- The Aimorés, were Tapuyas, and not Tupys. They held the shores south of Ilheos, to Porto Seguro, and were the most savage and brutal of all.

8.-The Goitacás, were divided into three tribes : The G. Campos, the G. Gauçú and G. Jacoritó. They occupied the country south of the Aimorés, to 22

degrees south, lat., near the edge of the present state of Rio. 9.—The Tamoyos, belonging to the Tupys,—from Cape S. Thomé to Angra dos Reis, 40 leagues of the coast, with the numerous inlets and extensive bays.

Tamoya means grandfather. 10.—-The Goanás or Guanás, from Angra dos Reis to beyond Cananêa, where their territory joined that of the Carijós. They were Guaranys.

11.—The Carijós, belonging to the Guarany family, and held the coast from

Cananêa to the Lagoa dos Patos. 12.—The Tapuyas of the south—Charua and Minuan—from Lagoa dos Patos

to the La Plata. These were the tribes noticed by the writers prior to 1558.

"The classification of the Indians of Brazil by Dr. Carl V. Martius in his "Zur Ethuographia Amerika's Zumal Braziliens"-Leipzig, 1867-divides the Indians of Brazil into eight classes. 1-The Guaranis, whose home is on the eastern slope of the Andes, near the head waters of the Madeira; from there only one branch descended to the Lagoa dos Patos; another went north to the Amazon, to the west of the mouth of the Madeira, descending the river to Marajô, ruling the whole coast from this point to the Lagoa dos Patos, also holding a great stretch of the interior between the Tapajóz and the Xingú, which they called Tapui-rama. A powerful race to which Von Martius gives the name of

"2--The next in order of numerical importance are the Ges and Crans, whose warrior. home was the central region between the table-lands, whence come the tributaries of the Tocantins and Araguaya-the part of the country called by the Tupys, Tapuirama, the home of the Tapuyas or hut-dwellers.

3-The Guck, Coco, who lived on the slopes of the Andes, north of the Tupys, who called them the Tutiras or Uncles. They held the great region of the

Oyapock and Guayanas. "4-The Crens and Guerengs held the wilds of S. Paulo, Paraná and Bahia.

"5-The Paraxis and Paragis lived in the forests of Matto Grosso.

"6-The Guaytacá, or runners of the forests, occupied the coast between Rio

and Bahia. "7-The Aurac, Aruaquis (Arrowaks?) occupied the Amazon region to the

"8-The Guaycurús, or horsemen,-the Gran-Chaco, Argentina, lower Matto-North.

Grosso, Paraguay and southern plains. "This division has a language basis. Von Martius, in his Glossaria Lingorum Brazilientium, speaks of eight languages and more than eighty dialects.

"The Tupuy-Guarany languages are essentially one, the slight variations being chiefly in the verbs, for example :

What is your name?	Tupr-Maan pa ende rera ? Guara 19-Embae pá ende rera ?
Bring me fire :	Tupy-Reruri tatá chebe. Guarauy-Erú tata chebe.

In Ges, Cahiapo or Kran-Amren inam cuê coeman.

The tribes around S. Paulo spoke different dialects of the *Tupuy-Guarany*. The *Kran* spoken by the Chavantes, Cherentes, Cayapós and Coroados is a widely different language.

Gen. Magalhães relates that when he lived in the region of the Araguaya an old chief, *Coinamá*, told him that his forefathers came from the mountains where the sun died, into the country where it was born, and that the chiefs, the *Tuchawas*, some days before leaving the home-land, sounded the war-horns and shouted the war-cry through the villages : "Yá số Pindorama koti, itamarána²po anhantin yara-rama ae recê." "Let us march to the land of the Palm, with arms in our hands, and we will be conquerors of it (Lords of it.)" With this cry they advanced and took possession of all the land.



Botocudos.

Gen. Magalhães does not believe that the Indians of Brazil were cannibals, in the usual acceptation of the term, i e. they did not kill human beings for food; they sometimes devoured enemies taken in battle, for vengeance, never to satisfy hunger. Prisoners taken in battle and condemned to death were given a chance for their lives. They were allowed to choose a wife, with whom they lived while preparing for death, and who, according to Souza, sometimes fell in love with the prisoner and helped him to escape, going with him. They were well fed and, when the time came to die, were furnished with weapons with which to defend themselves, but were secured by a stout rope fastened round the waist and tied to a tree. It sometimes happened that they were able to kill their executioner and escape the death sentence, becoming one of the tribe.

When the Portuguese wanted a pretext for reducing them to slavery, they represented to Pope Paul III. that they were not human beings and should be made to minister to the wants of Christians; that their owners should be permitted to ill-treat, wound and even kill them as they would their oxen and horses. The bishop of Chiapa testified that the Spaniards killed and cut up Indians to feed their dogs. It is a fact that more than 60,000 Indians were held in slavery in S. Paulo by less than 2,000 half-bred (Mamelukes).

Pope Paul III. issued the bull "Universus Christus fidelibus, etc.," declaring the Indians to be men, and, as such with rights to life and liberty. This gave rise to the bitter feud between the Paulistas and the Jesuits.

THE RELIGIOUS IDEAS OF THE TUPIS.

André Thevet, in his Cosmographie Universel, speaks of a fragment of Brazilian Theogony published in 1550, reprinted by Ferd. Denis, and entitled "A Brazilian Festival Celebrated in Rouen, France, 1549," of which the following is a resumé:

"The persons who, among the natives of Brazil, have charge of divine matters are called Caraibas and Pagés, and are the priests of the tribes.

"Above the things of earth there is a being whose name is Monān or Monhān, which means the constructor, builder and author, to whom they ascribe the same perfections that we attribute to our God.

"This God created Trin-Mage, from whose head proceded Tupan.

" (Montoya translates Tupan: Tu, an exclamation! Pa, an interrogation?-

meaning, Quid est hoc?-What is this?) " Monhãn had two sons, Som-

may-who the Jesuits believed was St. Thomas, and Caraiba, whom the savages burned. Sommay had two sons, Tamandonaré, the farmer, who was good, and Aricuta, who was a brave warrior, but In time Aricuta tried to bad. kill his brother, who, striking the ground with his foot caused a fountain of water to break forth which made a flood. In order to escape from the water they ascended the highest mountain, but the waters continued to rise and they took refuge in trees,-Tamandonaré in a Pinduá and Aricuta into a Genipá (1). In this flood everybody perished but the two brothers from whom sprang the present races: the good, or Tupinambá, from Tamandonaré; the bad, or the Tominús, who are and always will be at war, from Aricuta.

General Couto de Magalhães stated that the theogony of "the



General José Vieira de Couto Magalhães. S. Paulo, Brazil.

Tupis of the Amazon is different from this, and is so set forth in his "O Selvagem," of which he is preparing a second edition, enlarged and revised, containing a new collection of legends, and contributions to the language and customs of the remnants of the great tribes now inhabiting S. Paulo.

Many vestiges of the religious beliefs and practices of the tribes formerly inhabiting S. Paulo may still be found among the older inhabitants and in popular phrases and words. For example Caipora, applied to an unlucky person, is from the Tupy-Caha-pora- a bad spirit. Anhangabahy, the name of the little stream that runs through the City of S. Paulo, is from Anhangi,-the name of a tree of whose flowers the little upland deer are very fond, also of the Godess, who protected the game of the plains and who appeared in the form of a deer, -- and yba-y, water from, -- water from the Anhangi.

⁽¹⁾ Pinduá may mean palm, emblem of peace. The warriors still paint their bodies a dark blue with the juice of the Genipapo when going to war.

There may still be found in the interior large bodies of the *Cayapó* Indians in primitive tribal relations. (See Cayapó chief in following picture).



The Baccahiris Indians, who formerly inhabited the region of the Rio das Mortes, in the State of Matto Grosso, were said to be of white complexion, and a branch of the Paracis, the chief Indian race of Matto Grosso. Henderson mentions the Manejos, or white Indians, of Maranham, as living on the Tocantins, below the Araguaya. The tribe from which the illustration is taken are known by the name of Anambeios.

The Gaujajares of the River Pinaré, are as white as the average Castilian, though having the unmistakable chief Indian characteristics, —large head, high cheek-bones, wide, flat face, small eyes, small nose, and prominent, yet not thick lips, small chin, narrow forehead, short neck, deep, broad chest, long arms, small hips, hands and feet and short stature. The *Carijós* have almost entirely disappeared under the influence of the white man's vices.

A small tribe of *tame Guaranys* is found not many leagues from Santos, sadly mixed and demoralized but still keeping up the semblance of tribal organization.

The *Botocudos*, formerly a powerful nation, are reduced to about 4,000 adult men, living on the Rio Doce and the confines of Espirito Santo.

They present an interesting problem to the Indianologist.

Ebrard claims that they belong to the Mongolian group of races that came over about A. D. 100, and took possession of Chiapas, Central, and and the Pacific side of South America, founded, in Bogota, the two empires of the Muysca, and in Peru the ancient Peruvian empire; that they broke off from the rest and took to the nomadic hunting life and uncivilized customs of a degraded tribe. Whatever their origin may be, they are different from the other Indian races of Brazil, and have strong resemblance to the Chinese.



White Indian Girl.

(Continued.)

THE DANCE OF THE BONES.

A BRAZILIAN LEGEND BY BERNARDO GUIMARÃES.

Ι.

Night, clear and cool, had followed an afternoon of tremulous heat in the great deep forests which line the banks of the Parnahyba, on the boundary of the provinces of Minas and Goyaz.

I was travelling through these regions and had just arrived at a toll-gate or custom house between the two provinces. Before entering the wood, a storm had surprised me in the vast smiling plains which extend as far as the little city of Catalão, whence I had come.

It was between nine and ten o'clock at night, near a fire, kindled in front of the door of the little custom house. I was standing with some other persons, warming my limbs, chilled by the dreadful bath which I had taken, much to my regret. Some steps from us the river's broad stream wound around, reflecting on its broken surface, like a serpent of fire, the red glow of the embers. Behind us lay the houses and gardens of the few inhabitants of the place, and behind the houses stretched the endless forests.

In the midst of the profound silence was heard the monotonous roar of the neighboring waterfall, which now thundered as if it were but a few steps off, and now lost itself in gentle murmurs.

In the country, at nightfall, everybody goes to bed with the birds. Darkness and silence are sacred to slumber, which is the silence of the soul. Only man in the large cities and the tiger in the forest, the owl in the ruins, stars in the sky and the genius in the solitude of his study, are accustomed to stay awake during the hours which nature has dedicated to repose.

However, I and my companions, without belonging to any of these classes, contrary to the rule, were awake during these hours. My companions were good and sturdy fellows, of that half savage wandering race, resulting from the mingling of negro and Indian, which roams the pathless forest along the Parnahyba and whose names are certainly not inscribed in the parish register, nor do they figure in the statistics which give to the Empire I know not how many millions of people.

The oldest of my companions, Cyrino by name, was the owner of the bark which gave passage to travelers. I would willingly have compared him to Charon, ferryman of Avernus, if the turbulent and noisy waves of the Parnahyba, which break the silence of the smiling desert, covered with the most vigorous and luxuriant vegetation, might be compared to the silent and sluggish waters of the Acheron. "No, it was

"You started from town very late in the day, sir?" he asked. scarcely mid-day; what detained me was the shower which overtook me on the The rain was so great and the wind so strong that my horse could hardly road. Had it not been for this, I should have been here by sunset." go on.

"Then when you entered the woods it was almost night?"

"Yes, indeed, and had been for half an hour."

"And you saw nothing on the road to trouble you?"

"Nothing, Cyrino, except at times a bad road and the cold, being deluged from head to foot.'

"And you saw nothing, absolutely nothing, You are the first. What day is to-day?"

" Saturday."

- - I needed to go to-day for some fishing lines that I had ordered, and did

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not go because my family told me it was Friday; with this rain it was the day to catch many fish!— — — O, Senhorinha!" shouted the old man more loudly.

At this call appeared, coming out of a neighboring hut, a girl of eight or ten years, dark and tanned, half clad, yawning and rubbing her eyes, though she evidently was a bright little thing, as lively as a capivary.

"Ho, missy, how came you to say to me that to-day was Friday? Ah, pussy, all right for you! To-morrow you shall pay for this. — — What day is it to-day?"

" I, too, do not know, papa, for it was mamma who told me to say it was Friday."

"Is that what your mother teaches you? To lie? Well, you shall not deceive me another time. Go away; go to sleep again, little råscal."

After the child, thus rebuked, had retired, casting a longing glance on some ears of green corn which the half-breeds were roasting, the old man continued: "See the arts of woman. My old wife is very jealous and invents many ways of keeping me at home. I have not a single fish-hook remaining, the last one went off to-night in the mouth of a *dourado*; and through the fault of these folks I have no way of catching a fish for my guests' breakfast to-morrow."

"Don't trouble yourself about that, Cyrino; but tell me what difference it makes to you whether to-day were Friday or Saturday, in going to get your lines?"

"What, sir? I travel the road through the forest on Friday? I'd rather float down the river in a canoe without oars. 'Twas not for nothing that I was asking if anything had happened you on the way."

"What is there on that road? Tell me; I saw nothing."

"Neither could you have seen anything; what saved you was that to-day was not Friday, otherwise you would have seen what I saw."

" But see what, Cyrino?"

"You did not see, three miles from here, a little clearing on the roadside and a half opened grave with a wooden cross?"

"I did not notice, but I know there is a grave about which they tell many tales."

"Very well, then! It is in that grave that the deceased Joaquim Paulista was buried. But it is only his soul that dwells there, the body itself wanders abroad through these woods, no one knows where."

"The saints preserve you, Cyrino, I can't understand you. Until now I believed that when one dies the body goes to the tomb, the Soul to Heaven or to hell, according to its good or evil deeds. In this case I see for the first time that they have changed places—the soul stays buried and the body wanders about."

"You don't want to believe it! Well, it is well known in all this neighborhood that the bones of Joaquim Paulista are not within that grave and they only go there on Fridays to scare the living. Unhappy he who passes there on Friday night!"

"What happens?"

"What did happen to me, as I am going to tell you?"

II.

"One day, ten years ago, I had gone into the country to the house of a friend who lives three miles from here. It was Friday, I remember as well as if 'twere to-day. When I mounted my mule the sun was low; when I reached the woods 'twas dark. I was already entering the woods when I remembered it was Friday. My heart beat fast as if asking me not to go ahead, but I was ashamed to return. Should a man of my age, accustomed to travel the woods at any hour of the day or night, now be afraid? Of what? Commending myself to Our Lady, I hurried on. I went ahead, but always suspiciously; all the tales I had heard told of the grave of Joaquim Paulista were running through my mind, and, to add to my trouble, the mule shied at every turn. By help of the spurs I kept him going on. As I neared the grave my heart sunk lower and lower. I took a drink, recited a *credo* and pushed on.

"Just at the moment that I was passing the grave, when I wished to go on the gallop, my pesky mule balked all at once so that no force of spurs could move him. I had just decided to dismount and leave the mule, saddle and all, in the middle of the road and run home, but I had no time. What I saw, perhaps you will not believe; but I saw it with these very eyes. From this fact I have come to believe that no one dies of fear, else I should have died on the spot."

Stopping a moment to light his pipe, the old man then continued:

"The moon was shining on the white sand in the middle of the road. While I was digging my spurs into the sides of the mule, there jumped out in front of me a group of small white bones, leaping, knocking against each other, and marking a certain measure as people do who are dancing to the music of a violin. Then from all sides came other larger bones, leaping and dancing in the same fashion.

Finally there came, from within the grave, a skuil, white as paper, with eyes of fire and, jumping like a frog, reached the middle of the ring. Then all the bones commenced to dance around the skull, which remained in the middle, jumping at times into the air and falling back into the same spot. Flight was impossible; my eyes were riveted on the dance, like a bird charmed by a serpent; my curly hair stood on end. After a while, the smaller bones dancing, still dancing, joined together and formed the two feet of the skeleton. These feet did not keep quiet, but joined with the other bones in a lively whirl. Then, by degrees, the whole skeleton was formed anew, still it stood in the road staring at me with flaming eyes.

Ah! my friend !-- -- I was in a dreadful state; had flight been possible, I would have gone anywhere. The accursed skeleton now commenced to amuse itself with me, dancing before me, all the time coming nearer, till suddenly it jumped up behind me. I saw nothing more. The mule started, we were snatched up above the highest trees. My prayers were of no avail. At last, my eyes grew dim, my head was all awhirl, and I became unconscious. When I came to myself, it was the next day and I was in bed at home. My wife had found me in front of the door, stretched on the ground, and the mule beside me. The gate was shut. How the mule could have entered, I know not. Nothing can alter my belief that we came through the air. I awoke with my body all bruised and the cracking of the bones in my ears. I had two masses said for the soul of Joaquim Paulista, and vowed I would never again set foot out of the house on Friday.

III.

The old boatman told this dreadful tale with a wealth of gesture and imitative sounds not to be represented in writing. The late hour, the silence and solitude made the story more impressive.

"Well, Cyrino," said I, "you were certainly the victim of the most frightful apparition of which there is any record since the spirits from the other world have appeared in this. But who knows if it were not the power of fear that made you see all that? Besides, you had resorted many times to the bottle, and perhaps your sight was dimmed and your head a trifle disordered."

"But, my friend, it was not the first time I had taken a drink, nor gone through the woods at night, and how is it that I never saw bones dancing in the middle of the road ? "

"It was your brain that danced, Cyrino; of this I am sure. Your imagination caused it all. As you said, you entered the woods feeling afraid, ready to change into things of the other world whatever you might see indistinctly in the dim

moon-light. The little bones that danced were nothing more than rays of moonshine shimmering through the branches moving in the breeze. The crackling that you heard came, doubtless, from some animal in the woods eating nuts. Your head was all in a whirl and the rest was imagination. Something gave your beast a start and he ran off with you at the top of his speed. I once had an experience like yours. I was travelling at night in a narrow road, when I saw something ahead which, as I came nearer, I saw clearly was two negroes carrying a corpse in a hammock. I tried to pass them, but they, too, were faster, always keeping the same distance ahead. I made the horse trot. They ran too. I slackened the pace. They went slower, also. I stopped. So did they. So I rode for half an hour, till I was thoroughly alarmed. Had not urgent business called me on, I should have turned and fled. Mustering all the courage that remained to me I put spurs to my horse and went for the sombre figures at full gallop. When I came up, you could never guess what I saw. It was a cowa brindle cow, all white in the middle, with the fore and hind quarters entirely black. Caught in the narrow way, it could neither turn to one side or the other, and so had to run ahead of me. But, if I had not discovered what it was, I should believe to-day that I had seen two negroes carrying a corpse."

My story had no effect upon the old man, who clung to his belief in the apparition. He then went on to tell me at length the story of the murder of Joaquin Paulista, and how firmly the people believed that he would never rest in his grave until his scattered bones were collected.

HISTORICAL SKETCH OF PROTESTANT MISSIONS IN BRAZIL.

(Continued from page 37.)

The first attempt made in modern times to carry Protestant Christianity into Brazil was by the Methodist Episcopal Church of the United States, by sending the Rev. Mr. Spaulding to Rio in 1835, as a missionary of that church. The Rev. D. P. Kidder was added to the mission in 1838. The death of his wife, however, obliged him to return in 1840, and hard times compelled the church to recall Mr. Spaulding and abandon the mission in 1842.

There was little to show for the five years of faithful work ; Bibles were scattered through the many places of the interior. Dr. Kidder made extensive journeys, of which he gave an account in his "Sketch of Residence and Travels in Brazil," afterwards merged into "Brazil and Brazilians," by Kidder and Fletcher, the most valuable book even written on the subject.

The American and British Foreign societies had been endeavoring to circulate the Bible in Brazil for some time, and still have agencies there doing effective work; but there was violent opposition from the priests and results could not be reported as they can now.

The Rev. J. C. Fletcher, a Presbyterian minister, labored for a time in Rio de Janeiro, under the auspices of the American and Foreign Christian Union and the Seaman's Friend Society, about 1851-1853.

It must have been one of the Bibles left by Dr. Kidder, in the far interior, which escaped the fury of the priests and fell into the hands of an intelligent young Brazilian, on the borders of Goyaz. He read it and calling some of his friends, told them he had found the word of God. (1)

He was told that it was a *false* Bible, and this led him to visit a priest some sixty miles away and ask the loan of the official Bible. The priest told him there was such a book knocking about the vestry somewhere, and that if he could find it he was welcome to read it, but that no good would come of it. He found it and compared it, word for word, with his own and thus satisfied himself that he had the genuine word of God. He and his friends now began to study The whole plan of salvation was made plain to them and they accepted it joyfully. The cobwebs of superstitution and Mariolatry were swept away and the pure light came into their hearts.



Rev. A. G. Simonton.

They now desired to organize, and consulted by letter a lay missionary living near the coast, as to the steps necessary to organize a church and also as to certain rules of personal life. Unfortunately, or perhaps fortunately, he could give them no specific directions and referred them to the New Testament as a sure rule for all questions of Christian procedure. They took his advice and organized themselves into a church.

Years afterwards they were visited by an ordained missionary, who found that this group of spontaneous Christians, who had never before heard an ordained Protestant, had a genuine Christian church. He was amazed at the purity of doctrine and life, simplicity of faith and the aggresive character of their Christianity. They had evidently heard the "Follow me" and the "go ye." The deacons attended to material affairs and the elders to spiritual, taking turns in preaching, expounding the Scriptures and carrying the Gospel to neighboring communities. This little church has

already produced another and bids fair to become the mother of churches. The undiluted word of God is a *living* thing, and like germinal matter, possessing the principle of life, is able to reproduce itself infinitely, by a sort of segmentation. The two workers retired sad and disheartened, but the one copy of the Word which escaped the fury of the enemy is doing far more than they, in their

most sanguine moments, could have hoped to do.

Dr. Kalley, a pious Scotch physician, well known through his successful labors in Madeira in 1842 to 1846, went to Rio de Janeiro about 1854 or 1855, and for many years maintained, in his own way and on his own account, a work of some importance there. He has had a church at Rio de Janeiro since 1858, and some preaching stations in the suburbs; and in 1873 he organized a church in Pernam-He has no ecclesiastical relations with any branch of the Church of buco. Dr. Kalley retired in 1876, and died five years ago. Rev. J. M. G. dos Christ. Santos is now pastor of the Church.

The first missionary of the Presbyterian Church, the Rev A. G. Simonton, landed at Rio de Janeiro in August, 1859. After acquiring the language so as to use it with some facility, Mr. Simonton opened a place for Portuguese in May, 1861. It was a small room in the third story of a house in one of the narrow [Continued.] central streets of that great city.

(1) Part of this article was contributed by the Editor to the "Woman's Work for Women."

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BRAZILIAN AFFAIRS.

No one familiar with Brazilian character, or with the financial history of the country for the past eighty years, ever suspected for a moment that there would be anything like a repudiation of the public debt, of which certain European journals prated so persistently and proved so conclusively; the friends of Brazil feared the government might be obliged, in the best interest of all concerned, to defer, for a while, payments on the foreign loans, which were being made at an unjustifiable sacrifice; those acquainted with the rigid temper of the honorable Paulistas,-President Prudente de Moraes, and his able Secretary of the Treasury, Dr. Bernadino de Campos, knew that there would be an honorable, honest and wise adjustment of some kind.

As we intimated in our last issue, a three years *moratorium* has been definitely arranged, at the suggestion of persons in the highest financial circles of England, and the amortisation of the foreign debt, including the $4\frac{1}{2}$ per cent. home loan of 1879, is suspended for ten years. A loan of £ 10,000,000 is made,—the bonds to be issued as required, to meet the interest

on foreign loans and railway guarantees,—at 5 per cent. interest and 1/2 per cent. amortisation. The holders of Brazilian bonds and railway guarantees will receive these funding bonds at par in payment of interest. The amount of the interest on the foreign debt, reduced to paper currency at the rate of 18d per mil-reis, is to be deposited by government as interest becomes due, and can only be applied to the withdrawal of currency, or for the purchase of gold with which to renew specie payment of interest on the debt, or to the reduction of the debt itself. Government will also carry out the law already enacted by Congress for the conversion of gold apolices into currency bonds.

The amount of all outstanding liabilities, for three years, will be $\pounds 8,082,574$, which will leave more than a million of the funding loan to be emitted if needed. This arrangement will operate to withdraw from circulation 113,377:153\$000, which will be used to reduce the volume of currency or form a gold reserve, reducing the currency in circulation to about 700,000:000\$000, and enhancing its value proportionately. The conversion of the gold 4s into currency 5s will produce an economy of 92,125:449\$000, which with the probable improvement in exchange will make a saving of more than 120,000:000\$.

The contract was signed June 15th with the Rothschilds, who expressed satisfaction at the final settlement, in the face of severe criticism and strong opposition. Of course, the pessimists, some of whom have personal grievances or have failed to foist some bogus scheme upon the country, were disappointed and protested loudly.

No one ignores that the plan will impose hardships upon some, but it is adopted and is, considering all interests, equitable and honorable. Brazil has three years in which to reorganize her finances and economize. Her liabilities have not been made less, and no part of the debt is diminished by the arrangement, on the contrary, it has been sensibly increased, but the remittances at ruinous rates, and the unwarranted sacrifices have been stopped; the economy, already realized by the joint operation with foreign and home loan, amounts to a handsome sum; exchange immediately rose from less than 6d to nearly 8d, business has improved and, in addition to the era of peace and tranquility upon which Brazil has entered, we may predict a period of material prosperity.

On the political horizon there is not a cloud visible. The administration of Prudente de Moraes, which began amid the gloom of civil war, bitter factional strife and general discontent, bids fair to close in peace with evident signs of commercial prosperity in the immediate future.

The profound depression caused by low prices of coffee is being relieved by the wise action of the planters in turning their attention to the cultivation of food crops-corn, beans, rice, the raising of stock and the fostering of the smaller local industries, which had been entirely neglected for the grand-culture of coffee during the reign of high prices; this is done without detriment to coffee cultivation, but rather with a decrease in the cost of its production, inasmuch as hands are hired by the year and kept occupied in the cultivation of food crops when not needed for coffee, thus diminishing the price of labor and lessening the cost of living.

There is an increased flow of foreign capital into the country as some of the large coffee estates have been acquired by foreign companies; foreign syndicates have purchased tramways, and there is unusual activity in the opening up of gold mines with foreign capital; the immense lumber interests are being looked after quietly, and, altogether, everything looks brighter.

Peace has come to our own country and with it there must come a very sober thought concerning the new responsibilities which it has brought, and a suspicion that, in the past, we have not done our whole duty by these Latino-American peoples.

Justice Brewer, as recently reported

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in a Philadelphia paper, struck the keynote when he said that the first thing to do for Cuba, to make her capable of self-government, was to give her a system of common schools. The same may be said of every Latin Republic from Mexico to Cape Horn.

Our responsibilities for evangelizing and civilizing India, Africa and China may be divided with the Christian peoples of Europe, whose interests and sense of duty should impel them to do the work; but we are alone responsible for the fact that in this Western Hemisphere there are still places where missionaries are assassinated for preaching Christ and Bibles are publicly burned.

If to the many millions spent in this war a few be added to help educate all of the Latino-American people who are struggling towards liberty, handicapped by the ignorance, superstition and idolatry of the priestridden masses, the war will prove a good investment. A little more light for "the neglected continent!"

MISSION NEWS.

The mission of the Protestant Episcopal Church, established only a few years ago in Rio Grande do Sul, shows great prosperity.

There are now eight organized churches with 340 communicants, and 508 pupils in the Sunday Schools. The mission has one day-school. The contributions for 1897, for all purposes, amounted to 16:292\$040, or 4\$792 per capita. It publishes a religious journal, the Christian Standard, in Portuguese, which is a valuable aid in spreading the truth. The blessing of God is visible in the work.

Rev. W. E. Finley has just returned to his field in Sergipe and will resume work at Larangeiras, Rev. Mr. Bixler going to Aracujú. The work in schools and churches in Bahia and Sergipe is in a most flourishing condition. A new school has been opened at the Feira, under Miss Christine Chamberlain and a young teacher from the St. Paulo training school. A new Presbyterian church is to be opened, in Nictheroy, under the first church of Rio, which has called to the aid of its pastor, Rev. Alvara dos Reis, the talented young licentiate, Erasmo Braga.

Mr. Myron A. Clark and his family also reached Rio in good health, and has already resumed work as Secretary of the Y. M. C. A., which has been so greatly prospered under his guidance.

The Rev. M. P. B. Carvalhosa, the beloved pastor of the Second Presbyterian church of S. Paulo, has just returned from the Juquiá region, where he baptised 36 adults and 26 children.

Rev. J. B. Rodgers and Rev. J. L. Kennedy, with their families arrived safely in Rio. Mr. Rodgers obtained permission of his Presbytery to work outside of its limits and will shortly begin a new work in S. Francisco, state of Sta. Catherina.

The work of the Southern Presbyterian mission at Lavras is prospering. The educational work under the veteran missionary, Miss Charlotte Kemper, and the evangelistic work under Rev. S. R. Gammon, are growing in numbers and influence.

During the year 1897 the churches of the Methodist mission received into communion 307 adults and baptized 142 children.

There are 5 self-supporting churches and 23 circuits, with a membership of 1,729. The enrollment in the Sunday schools is 1,043.

The mission has one boarding school and six day schools (exclusive of the schools under the Woman's Board), with 195 pupils.

The mission of the Southern Baptist church reports 21 organized churches and 13 out-stations, with an active membership of 1,270.

The Sunday schools have an enrollment of 395 pupils; the number of pupils in the two day schools is not given. A new Methodist church was recently inaugurated in Petropolis, and during the week eight persons united with the church.

The Protestant Hospital fund in Rio now amounts to 76:868\$270, which is an increase of 18:587\$060 since the last report.

Rev. J. B. Kolb reports that in one of his itinerating tours in the interior of Bahia, he was assaulted by a group of fanatics, and several members of his little congregation were seriously injured. This, coupled with the recent murder of an evangelist in the neighboring State of Pernambuco, shows a state of affairs in that part of Brazil not in consonance with the laws of the land or the spirit of free institutions. We feel sure the authorities will take prompt measures to protect the missionaries and make religious liberty a fact in all parts of the republic.

The editor will sail for Brazil about Sept. 15th. His Brazilian address will be Caixa 14, S. Paulo, Brazil, S. A. All matters relating to the BULLETIN should be sent to the Brooklyn address, but parties desiring any information concerning Brazil should send to the S. Paulo address.

COMMERCE.

"The continued re-construction of edifices in this city, replacing antiquated structures of one or two floors with others of greater height and better appearance," says the *Rio News*, "would seem to indicate that the proprietors are finding business much easier, if not more profitable than the most of us. In a brief time the supply will exceed the demand, and then we may expect a fall in rents."

Brazil is the best customer of Newfoundland for its cod fisheries. In the month of August, 1896, Brazil bought 7,996 quintals of salt cod, and 20,843 quintals in August, 1897; Portugal coming second with half those quantities.

During the past year the Compahia Paulista transported gratuitously to the interior of the State of San Paulo, 43,082 immigrants, whose fare if paid, would have amounted to 234:239, \$500. The company began giving free transportation in 1882, since which time, up to December 31st, it has transported 400, 464 immigrants, whose fares would have amounted to 1,623:-725\$365. We very much doubt whether this is just. The company is run by planters. As immigrants going up country are for account of the planters, the planters should pay their fares. The receipts of the Mogyana Railway amounted last year to 16,470:145\$571, and the expenses to 10,888:533\$253. The sum of 466:-208\$578 for guaranteed interest is not, we understand, included in the above mentioned amount of receipts. The dividend paid last year was 10 per The company's foreign debt cent. has been reduced to £370,000. It is stated, in the report of the board of directors, that the Government has approved of the projected line from Camandocaia to Santos.

Bicylists are finding that pleasure must pay tribute as well as business. They are now required to pay 10\$ for having their machines numbered, and a general tax of 10\$ besides. This is a perfectly just tax, and if levied for the benefit of the roads, will be paid cheerfully by wheelmen.

According to - recent figures the quantity of Mangabeira rubber exported from S. Paulo in 1897, was 8,825 kilos., valued officially at 63:-147\$000. Another article of export is Rock Crystal which, though not large, is an index of the varied resources of the State.

It appears that the "Amazons Rubber Estates" was put upon the London market by the Westralian, London and Johannesburg Co., the last named company taking about £40,000 shares. It is a curious circumstance that a South African Mining Company should be so largely interested in a South American Rubber Company. From 1852, the hydraulic works of the Rio custom house have cost the aggregate of 12,717:495\$961, while the edifices and other internal works have cost, since 1855, a total of 6,975:035\$741.

The directors of the Southern Brazilian Rio Grande do Sul Railway have decided to recommend a dividend on the shares of the company at the rate of 6 per cent. per annum, free of income tax, for the second half of 1897, carrying forward £26,757, 18. 11d.

According to the recently published report of the Central Railway for 1896, the effective receipts for that year were 34,353:499\$363 and the expenditures 37, 103:540\$063, showing a deficit of 2,7500:83\$271. The line possesses 724k. 908m of broad gauge, costing 117,978:762\$415, and 496k. 920m. of metre gauge line, costing 31,582,330-\$500. The line carried 14,583:638 passengers, of which 12,118,453 were suburban, 2,286,866 for the interior, and 178,639 non-paying for divers localities. The total freight traffic, including luggage, amounted to 1,-083,477,443 kilogrammes, of which 170,672,939 kilogrammes were carried gratuitously.

In the first quarter of the present year there were imported at Santos 25,003,000 kilos. of merchandise described as being composed of articles of prime necessity. The official value of this merchandise was 8,869:633, and the amount of duty paid thereon 1,820:000.

The London and River Plate Bank had received, through Messrs. P. S. Nicolson & Co., 168 kilos. 297 grammes of gold from the Morro Vermelho mines, and 54 kilos. 176 grammes from the Juiz de Fòra mines, both in the State of Minas Geraes.

The Dumont coffee estates under the old management used to receive about 5s. less per cwt. than the average Santos price; this year they have received 5s. per cwt. more than the average price, showing the value of careful handling. Messrs. Wilson, Sons & Co., Ltd., have undertaken to supply the Hospital Samaritano (Protestant), of San Paulo, with all the coal it may require, counting from June 1st. This is a liberal and highly generous act, and, it is to be hoped, will lead others to make similar contributions towards the support of so deserving an institution.

The traffic of the Sorocaba railway shows a satisfactory and progressive growth in all branches, as will be seen from the following table:

Passengers,	Coffee,	Sundry Goods,	
1893424.502 1894. 391.261	Tons. 15.816 27.974	Tons. 113,902 112,145	Amounts. 3.851,268\$530 5.013,069\$400
1895	24,700 20,804 45,102	150,010 207,407 218,483	5,915,806\$000 6,717,736\$980 8,532,950\$900

The yield of gold from the St. John Del Rey Mining Co. has reached \pounds 23.380 per month and promises more. This is the oldest English mining company in Brazil, having been organized in 1830.

According to the report of the Paulista Railway Co. it had carried in 1897 4,739,500 bags of coffee at an average of 2\$141 per bag; to this add the charges of the English company from Jundiahy, and we have an average cost from all points on the Paulista of 3\$840 per bag, or 960 reis per arroba, to the port of Santos.

There has been great activity in the lumber trade of the Argentine Republic during the past year, no less than \$6,000,000 having been handled.

Brazil wants some of the same energy and enterprise to develop the great pineries of Parana and look after the enormous supply of furniture woods on the coast. The Canella Preta can be found everywhere and is a perfect substitute for the fast disappearing black walnut.

The cold is said to have been the severest known for many years in several of the interior districts of S. Paulo. In some localities the coffee trees had been slightly damaged, but in general they had escaped; although the S. Paulo papers of July 7 and 8 report heavy frosts in Botucatú, Descalvado, S. Carlos, Conquista, Moeoca, Batataes, Araraquara and the whole Tieté region, doing great damage to the coffee orchards.

It was understood that the broad guage on the S. Paulo branch of the Central Railway would be completed to Taubate in July.

A correspondent informs us that there is a movement on foot for the export of live cattle from the State of Ceará, Brazil, to Europe. The distance is only about half that to the River Plate and the voyage should only take about a fortnight in cattle steamers. The cattle of Ceará are said to be of very good quality, abundant and cheap.

The importation of fencing wire into Brazil shows a large increase as compared with former years. Rio Grande do Sul alone imported in 1897, 34,307 rolls of about 90 lbs., as against 20,473 rolls in 1896. The wire comes chiefly from Great Britain and Germany.

The traffic receipts of the Western and Brazilian Telegraph Company for the week ending July 22d, 1898, after deducting 17 per cent. of the gross receipts payable to the London Platino-Brazilian Telegraph Company, Limited, were $\pounds 2,780$.

SOBER THOUGHT.

Dr. Joseph Parker of London once said: "Oh, the luxury, the thrilling, unspeakable luxury of giving! Do not run off on some arithmetical issue, but when thou givest, enter thy closet, and when thou hast shut the door, give to thy Saviour in secret."

"I hope, Mr. President," said one of a clerical delegation to Abraham Lincoln, "that God is on our side." "I have not concerned myself with that question," was the answer, "but I have been very anxious that we should be on God's side." The Watchman in an editorial on "scorching" says: "The trouble with the church scorcher is about the same as that of the bicycler, weak heart action. When the pastor is a scorcher, as not infrequently happens, the case is about as perilous as it can be and the warning may well be put up, 'Look out for falls.' Short pastorates are the common record of scorching pastors. Many organizations, but few conversions, mark the scorching church."

"The ships our nation needs," says the *Evangelist*, "are worship, fellowship and friendship. They are not men of war, but men of peace."

"It is not alone piety, or eloquence, or courage or learning, or all these combined, that make the missionary; he may have all of these qualities and miss the mark, if he have not modesty, tact, self-restraint, wisdom and the ability to suppress himself; or if he do not have that far-sightedness which enables him to see ahead of the present and build wisely for the future."

It was said of Horace Greely that he had not so much acumen of a certain sort or so much knowledge of men, but he had what was far better, namely: moral convictions, ethical standards, with which he did not play fast and loose, and a heart which knew no rancor.

A Boston paper says the devil cannot use a man to advantage who minds his own business.

The purity of life, integrity of purpose and the simple religious faith cherished by our forefathers, should be preserved as the foundation of all that is good in national and individual character. Every agency that contributes to the inculcation of a love of God, a devotion to country and a realization of our duties as individuals and as citizens, make for civilization and the upbuilding of mankind.— *President McKinley*.

NOTES AT RANDOM.

The Extent of Brazil.—The smallest state (Espirito Santo) is larger than Belgium, Saxony or Holland. The State of Rio is larger than Switzerland and Denmark, and a little smaller than Greece.

Ceará is larger than Scotland, Portugal or Ireland. Rio Grande do Sul is as large as Switzerland, Wurtemberg and Belgium together.

All Germany, with Belgium and Switzerland thrown in, could be contained in the State of Minos Geraes.

Railways. - The government of Brazil owns and operates (at a loss) nine roads aggregating 3,190 kilometers in length. These roads cost, calculating the mil-reis at par, \$162,-344,560, or about the total amount of the foreign indebtedness. During the present administration all construction has been stopped, and contracts amounting to \$5,130,285 have been cancelled, the government paying \$496,778 in indemnities to the contractors. Belonging to private corporations there are in operation 13,942 kilometers, of which 3,912 kilometers are subsidised by government and under government inspection; in construction there are 7,988 kilometers, of which 1,416 K. are on subsidized lines.

The last quarterly report of the Board of Health gives the vital statistics of the City of Rio de Janeiro for 1897 to correct errors which appeared in a previous publication. The principal entries are :--

Marriages	. 2,612
Births	13,915
Stillbirths	. 1,106
Deaths (excluding stillbirths)	
" under one month	
" from 1 to 12 months	. 2,169
" yellow fever	150
" small pox	
" beri-beri	
" malarial causes	1,212
" pulmonary consumption	

The report assumes a population of 750,000, and, from this, calculates the percentage of 19.4 per thousand.

The San Paulo *Diario Popular* of 16th May states:

"We are informed that, by a document executed in the city of Santos, the important export house of Theodor Wille and Co. realised the purchase of 40,000 bags of coffee (say 160,000 arrobas) of the future crop from the important planter of Ribeirão Preto, Sr. Schmidt. The purchase was made for 2,000,000\$, payable on sight, the coffee to be delivered at the station of Ribeirão Preto. It is reported that this operation was realised in consequence of a telegraphic requisition from an important Hamburg house. This auspicious notice, which was communicated to us by a trustworthy person, is of a nature to produce the best impression on the minds of the planters of our State, for shows an intelligent prevision it among buyers of an imminent increase in the price of coffee."

The temperature in San Paulo had been exceptionally low, and frosts were reported from various localities. Heavy frosts were also reported from southwestern Minas.

The state of Paraná lies immediately south of S. Paulo, from which it was set off in 1854. It has an area of 221,319 square kilometers and a population of only 190,000. Its capital city, Curityba, is about 3,000 feet above sea level and 60 miles from the seaport of Paranaguá, with which it is connected by rail.

A considerable number of Germans and Poles have settled in the state in recent years and are prosperous small farmers. Large numbers of cattle are raised on its extensive prairies. Its vast pineries will soon be a mine of wealth; already enterprising foreigners are looking after them.

The transfer of Sir Philip Currie to Rome, Sir Nicholas O'Connor to Constantinople and Mr. Straus' appointment to the same place, presents a strange spectacle of a Roman Catholic and a Jew working together,—the former representing Protestant England and the latter Christian America at a Mohamedan court. Mr. Straus is quoted as saying, "Here am I, an avowed Jew, whose main duty it is to see that Turks, Greek Christians and Roman Catholics deal fairly with Christian missions carried on by American Protestants. He did his duty well enough to earn the hearty admiration of the A. B. C. F. M.

The President-elect of Brazil, has returned from his European tour and will assume the duties of his high office Nov. 5th.

We venture to say that he is better equipped by the trip abroad, has a better acquaintance with the political, financial and social conditions of the old world and will have a firmer grasp upon the affairs of his own country than he could have acquired at home.

We regret that he could not have extended his trip to this country where the same problems which confront Brazil are being solved; he could have studied the processes as well as the results.

Had Dr. Campos Salles been a prince of the blood, instead of a man of the people and the president of a new S. A. Republic, his reception could not have been more royal. He was fêted in Paris, dined in London, lunched by the Lord Mayor and invited to the state ball; received by the King, Pope and Emperor in Italy and Germany.

Everywhere he has left a good impression and improved the standing of his country.

IN LIGHTER VEIN.

Teacher: "Mary, make a sentence with 'dogma' as a subject,"

Mary (after careful thought): "The dogma has three puppies."—*Exchange*.

Somebody gives the following antithetical advice: "Drink less, breathe more; eat less, chew more; ride less, walk more; clothe less, bathe more; worry less, work more; waste less, give more; write less, read more; preach less, practice more."—N. Y. Tribune. Dr. James K. Hosmer, while recently visiting Boston, had occasion to visit the new public library. As he went up the steps he met Edward Everett Hale. who asked the Doctor's errand. "To consult the archives," was the reply. "By the way, Hosmer," said Dr. Hale, "do you know were Noah kept his bees?" "No," answered Hosmer. "In the ark-hives," said the venerable preacher as he passed out of ear shot.—Ladies Home Journal.

A Harvard Professor, dining at the Parker House, ordered a bottle of hock, saying, "Here, waiter, bring me a bottle of hock—hic, hæc, hoc?"

The waiter, who had been to college, smiled, but never stirred.

"What are you standing there for?" exclaimed the professor. "Didn't I order some hock?"

"Yes, sir," replied the waiter. You ordered it, but afterwards declined it."—*Exchange*.

A little girl in a Pennsylvania town, in saying her prayers the other night, was told to pray for her father and mother, who were both very ill, and for one of the servants, who had lost her husband. She faithfully did as she was told, and then, impressed with the dreary condition of things, added on her own account: "And now, oh God, take good care of Yourself, for if anything should happen to You, we should all go to pieces. Amen."— *Trained Motherhood.*

A fox one day passed under a tempting bunch of grapes, hanging invitingly within reach. The fox looked at them for a moment and then passed on indifferently. This was because foxes are not vegetarians, and have never been known to have any desire for grapes. Moral: \pounds sop was either a fool or a liar.—N. Y. Journal.

Teacher: "Tommy, what is a knight errant?"

Tommy: "Puttin' out the cat."— Ind. Journal. "Are you in pain, my little man?" asked the kind old gentleman. "No," answered the boy, "the pain is in me."—Indianapolis Journal.

The following epitaph is over a grave in the Caroline Islands, which German diplomacy was trying to wrest from Spain. It would seem to show that the United States had pre-empted the soil.

Sacred to Wilm. Colis Boat Steerer of the SHIP SaiNt george of New BED ford who By the Will of Almighty god was siviriliery injured by a BULL WAALE off this Iland on 18 March 1860 also to Pedro Sabbanas of Guam 4th MaTE drouwned on the SAME Date his Back broken by WHALE above MeNTioned. -Rio News.

In the stress of denominational rivalry there are some who are wholly untouched. A writer in the Nineteenth Century tells us the following story of the British army:

"What's yer religious persuasion?" said the sergeant to the recruit. "My what?" "Yer what?" "Why, what I said. What's yer after o' Sundays?" "Rabbits mostly." "'Ere stow that lip. Come now, chu'ch, chapel or 'oly Roman?" And after explanation from his questioner the recruit replied: "I ain't nowise particklar. Put me down Chu'ch of England, sergeant; I'll go with the band."

But even over such home heathen Christianity has some restraining power.

Mr. Bunting-Young Grimshaw is going to marry old Miss Brodakers.

Mrs. Bunting (astonished) – For the land sake?

Mr. Bunting- Partly, and partly for the bank account.-Judge.

THE LAKE OF GOLD.

(THE LAGOA DOURADA).

The most persistent legend or tradition—not unmixed with authentic history of southern Brazil is that of a mysterious lake, hidden in the tops of the unexplored *Itatins*—an elevated mass of mountains with its high peak, which attracts the attention of the traveller, coming from North or South, for leagues, detached from the coast range of Paranapiacaba. That the story is not *all* legend, or *all* fancy, is proven by the fact that several expeditions have been organized to explore the lake, two of which found it; and one man (1) brought back a sample of the sand glistening with gold.

In modern times a well-known engineer, Dr. Carlos Rath, organized a party of Caipiras (2) who were raised in the vicinity, to make an exploration. They entered the forest by the way of Conceição de Itanhaen, belng guided by the itinerary known to so many people of Iguape-the same that had been used in previous expeditions and supposed to be a copy of the original paper written by John Aranzal, whose adventures we shall shortly refer to. After leaving Conceição, he took on a few more men, provided himself with food, arms, etc., short lances with which to fight the Jacarés (alligators) which abound in the bayous. After several days of difficult and dangerous travel, they reached a large lake surrounded by the lofty peaks of the Itatins. On attempting to enter the water from the wooded side to cross over to the sandy beach, they were attacked so fiercely by enormous Jacarés, that the men lost courage and refused to proceed. Alone the Doctor could not go, so he reluctantly retraced his steps. He always said in speaking of the attempt: "I found the lake of gold, but through the cowardice of my companions, could not explore it. I went to Rome, but did not see the Pope."

The lack of canoes, without which the exploration of an unknown lake is impossible, was the chief cause of failure. He was also misled by following the route taken by a single individual, unincumbered, and fleeing for his life, and probably reaching the lake in the dry season when its shores could be explored on foot.

Dr. Rath always intended to return properly equipped and complete the exploration, but advanced age, infirmities and finally death, prevented.

The tradition, or it may be history, in which all the expiditions originate, is as follows:

In the early days of S. Paulo, when the Portuguese settlement was a mere village, a man of some importance, having wife and children, committed a murder under circumstances which obliged his countrymen to condemn him to death. He escaped and fled to the woods, making his way down the mountains to *Conceição*, and thence to the Indian village of Peruhybe, where Fr. Anchieta was living among the Indians. He confided his story to the priest and was by him advised to take to the mountains. From Peruhybe he went north, and according to descriptions afterwards given, must have followed the river Una, and finally reached the lake which he called the I ake of Gold, on account of the quantity of gold in the sand on its shores.

The unfortunate criminal, fascinated by the sight of so much gold, remained

⁽¹⁾ The writer is acquainted with an old man who accompanied an expedition some forty years ago and he brought specimens of gold with him, but who was so impressed with the dangers of the trip that no amount of gold would induce him to return. It is true that gold has been found in all the regions about this range of mountains.

⁽²⁾ Caipira, from the Indian word *Caapira*, a clearer of the forest is the name applied to the country people of S. Paulo.

there two years, enjoying the mild climate, and living on the abundance of nuts, fruit and game. (Probably with the Indians, though no mention is made of them in any of the traditions.)

Desiring to return to his family, he took as much gold as he could carry and returned to S. Paulo. On arriving there he was able to purchase pardon, and with the rest of the gold live in comfort and settle a handsome sum on his two daughters. Before his death he was induced to write out the itinerary, which was as follows:

"The way to the Lake of Gold :— From the village of Iguape, take canoes to the rio Una, go up the river to the foot of the serra behind the peak of the 'S. Lourenço'; there leave the canoes, because the rapids do not permit their use, go on foot to the top of the serra, keeping along the banks of the stream which is, above the rapids, again navigable; and on the 2d day a great *Figueira* will be found, covered with sacupemas, due north, about a league and a half is the Lake of Gold."

This writing first appeared in the hands of Captain Alexander, of Iguape-a boat-builder-to whom it had been given by the son-in-law of the discover.

There are other legends relating to *Botucarahú*, the Indian name of the curious peak under which the Lake of Gold is supposed to be.

This peak which glistens in the mid-day sun like polished metal, and which, at its great elevation, looks like a gigantic fly on the arched neck of a horse, can be seen from any point on the coast of Brazil between Conceição and Iguape.

The name means, in *Guarany*, "horse and fly," though some say it should be *Itacabarú*, from *Ita*—stone, and *Cabarú*—horse.

The celebrated father, Anchieta, who knew the secrets of the Indians of the Jurea, and who advised the fugitive what course to take, and perhaps kept in communication with him—used to say to the people : "between mother and son there lies a great treasure." This reference to Mother and Son was interpreted to mean "Our Lady of Conceição," and "Good Jesus of Iguape," the official titles of the two places. It is exactly between these two points that the mysterious mountain is found at whose feet lies the "great treasure"—the Lake of Gold.

There is a belief deeply rooted in the minds of the common people of all that region that the Creator has deposited immense riches at the foot of the great peak, which is also called the "finger of God," and which in remote times the Indians claim, emitted smoke, and that some day they will be shown to them.

Several expeditions have been planned to explore the lake but the difficulties and dangers of the journey, not to speak of the expense, have discouraged those who have attempted to make up a party.

> My poet, thou canst touch on all the notes God set between his After and Before, And strike up and strike off the general roar Of the rushing worlds a melody that floats In a serene air purely. Antidotes Of medicated music, answering for Mankinds forlornest uses, thou canst pour From thence into their ears. God's will devotes Thine to such ends, and mine to wait on thine! How, Dearest, wilt thou have me for thy use? A hope to sing by gladly? or a fine Sad memory, with thy songs to interfuse? A shade in which to sing—of palm or pine? A grave on which to rest from singing? Chose.

PRESIDENTS OF BRAZIL.

The first President of the Republic was the brave, chivalric old soldier, Field-Marshal Deodoro da Fonseca, who did not hesitate to take his handful of troops to the government headquarters, read a lecture on the abuse of power to the prime minister and demand a surrender of the cabinet. It is not likely that the old general intended to overthrow the government and set up a Republic, but simply to get rid of an obnoxious ministry; be that as it may, there were those behind him who knew what they were about, and the Republic came to stay.

Deodoro was too much of a soldier to be much of a politician-honest, brave and well meaning, he fell a victim to astute politicians and was obliged to step down. Brazilians will easily forgive him the grave political blunder, that endangered for a while, the peace of their country, and will remember him with gratitude.

During the first year of the Republic, the provisional government was strong and successful; among the men who entered into its formation are found those who have since held the country together.

The second President was Floriano Peixoto, the iron marshal, who was elected Vice-President, and simply completed the unexpired term of Deodoro. He was, to all intents and purposes, a dictator, by force of circumstances; he brought the country out of a period of agitation and revolt that threatened its very existence, and deserves well of his country.

Up to this point the people had not been consulted, for the country had been virtually governed by the army. The third President, and the first elected by the people, was a civilian-Dr. Prudente de Moraes Barros, the present incumbent. The history of his administration will be cited in the remotest future of the Republic as the "Restoration." His grave, dignified and severe personalty is reflected in the spirit of conciliation, firmness and justice, as well as the unswerving adherence to principle that has characterized his administration, The purity of his private life has not been touched by the tide of political corruption which he has been called upon to stem; on the contrary, the unaffected simplicity of his family circle has given to official life a character more in consonance with Republican Institutions than the ostentatious display of a psuedo Imperial court. Dr. Prudente de Moraes Barros possesses that same simplicity of life, singleness of purpose, straighforwardness, unapproachable honesty and tenderness of heart which characterized Abraham Lincoln, but he has neither Lincoln's humor nor his story-telling ability.

His Secretary of the Treasury, Dr. Bernadino de Campos, also a Paulista, is a man of mark. An original Republican, he was the honored Governor of his native state; during his administration public instruction received an impulse which sent it far in advance of that of any other state; he is a true son of the people, and, above all, a man of irreproachable public and private life, of tried courage, high ideas, and unswerving devotion to duty. He is a man whom we shall not be surprised to see, some day, in the Presidential chair. The coming President, Dr. Campos Salles, completes this trio of remarkable

Paulistas, who have contributed so much to make a Republic possible in Brazil.

If the new President, in consonance with his precedents and character, is able to carry out the policy of administrative economy, severity in collection of the revenues, and firmness in the administration of law, without fear, favor or undue partisan bias-a policy inaugurated by his predecessor and supported by himself; if he is able to adjust the business of the Federal government with wisdom, prudence and firmness during the three short years of the moratorium; if he is able

to make the government carrying enterprises either *pay*, or turn them over to private corporations, thus taking government out of competition with private capital,—then we may look forward to permanent prosperity, to a period of political tranquility, to an era of education and lifting up of the nation, to a slow but sure doing away of old abuses and to the adoption of reforms which will carry the nation towards the high ideal of a free people.

If, on the contrary, he finds his hands tied by political combinations and partizan intrigue; if he is not strongly supported by the best elements of Brazilian society, regardless of party affiliation; if legislature blocks the way to administrative reforms, and if "acquired rights"—usually acquired through political favoritism—are allowed to perpetuate abuses and sap the revenues of the country;—in short, if by some combination of unfortuate circumstances, things lapse into the old ruts, then the delay will only put off the period of dissolution and anarchy.

We believe the incoming President will be able to hold the helm firmly and steer the ship of state safely through; that his hands will be strengthened by the best men of the country; that the revolutions and the demagogues who incited them are things of the past; and that the people of Brazil are waking up.

CARE OF HEALTH IN THE TROPICS.

(The following extracts are taken from a "talk" given at the rooms of the Presbyterian Board of Foreign Missions, 156 Fifth Avenue, June 20th, to a group of newly appointed missionaries.)

The machinery of the human body is able to adjust itself to a wide range of temperature. The Esquimaux thrives in a continued low temperature, while the African enjoys life under a prolonged high temperature, —both of them by virtue of *habits* which they have acquired slowly, through generations perhaps.

Going, therefore, from the cold north to the hot south, we must drop many of our old habits and acquire new ones; while doing this we are more susceptible to disease than usual; there is a strong tendency to certain degenerative changes, due to the irregularities of function,—not acute disease with active tissue change, but disturbance of normal action; this is *acclimatization*, a physiological rather than a pathological process, and one that needs care and prudence, not medicine * *

The diseases peculiar to the tropics need give the foreigner little concern, there are very few of them:—Beri-beri, Dengue, the tropical diarrhœa, Sprue; the sleeping-sickness of the Congo, and the *shimi-mushi* of certain rivers of Japan. Most of the diseases to which you are liable in the tropics are also common to your own country: dysentery, yellow fever, typhoid fever, malarial fever, lung trouble, rheumatism, etc., etc. Disease and medicine should be left to the physician, when one is available. You should aim to *preserve health*, rather than *cure* disease. Avoid *dosing*. * *

On reaching the tropics for the first time do not try to rush the native, -- take things quietly; you will accomplish more in the end. * * *

In looking for a home,—if in the country,—seek a place high and dry, well drained,—not having a clay sub-soil,—with good water, out of the range of high winds and breezes that blow from marshes; avoid ravines and foot-hills where the soil is constantly saturated by water from the mountain streams. If psssible, have your house sheltered by trees, but not to the extent of shading it and making it damp. Preserve the natural felting of the grass around the house and keep it well trimmed and clean. Have neither vegetable nor flower beds under the windows of your sleeping rooms. Do not allow water to be emptied over the ground near the house or to stand in tubs or other vessels. Do not have the W. C. in or near the house. Beware of pools of stagnant water in the neighborhood, have them fiiled up if possible. See that the house is well ventilated underneath; put screens to the windows to keep out the flies. These and other precautions, which common prudence and good sense suggest, are more important in the tropics than here. If you are to reside in a city, observe the same rules as far as possible. Secure sleeping rooms on the cool side of the house and as high as practicable.

If there is a suspicion of tainted water, have it *boiled* and filtered, filtering alone is of little value. The water may be impregnated with fæcal matter and not be unpalatable; it may be crystaline and agreeable to the taste, and contain 40 per cent. of organic matter.

Any gastric trouble, ephemeral fever, diarrhœa, sore throat, etc., otherwise unexplained, may be safely charged to the water. In such cases have the drinking water boiled and look into the sources of contamination.

Old residents have learned to keep out of drafts, to avoid remaining in damp clothes, to wear light flannels the year round, to sleep in (woolen) pajamas. under mosquito netting when necessary, wear a liver-band when needed, and a sun-hat or carry a sun umbrella; take tepid baths, keep the feet dry, eat light suppers or none at all, keep out of the night air, and go to bed betimes. It is well for the new comer to do all this from the start. In travelling, it is a good plan to carry a strong, light hammock; a place can always be found to hang it,

and it is cleaner, more comfortable and safer than the bed of the wayside inn. We attribute our immunity from sickness, over thousands of miles of inland travel, largely to this precaution. * * *

The great bugbear of the tropics is *malaria*. Science has taught us that there is in the human system a self-defending element, which, if kept up to the proper degree of *efficiency* and *sufficiency*, is able to destroy or hold in check the germs of malaria and other similar diseases. In travelling through infected districts we have made it a practice of carrying some biscuit in the pocket and of eating frequently a little, to excite the secretions; never to drink the water of the places infected with malaria or yellow fever, without boiling it; avoid getting tired or faint from hunger, and keep out of the night and early morning air. Keep the tone of the system up and there is little danger.

The question of diet is an important one, and local usage must not be disregarded. Less of animal food and more fruits and farinaceous food is the rule. Ripe fruits, in their season, may be eaten freely in the early part of the day, *never in the evening*.

The habit, almost universal in the tropics, of taking a cup of coffee or a glass of milk and a roll (in tea countries a cup of tea), early in the morning, a solid breakfast at 10 or 11, dinner after 5 and a light tea at 8 or 9, is based upon wide experience and should not be trifled with. Drop your early breakfasts, your noon dinners and your hot suppers.

If a stimulant be needed, take a cup of coffee or tea, and avoid brandy, wine and beer.

There is usually a craving for acids; an excellent drink is made by boiling a sliced lemon for half an hour in a pint and half of water, sweetening and diluting to suit the taste. Tamarind water and common lemonade may be used freely.

Keep the bowels regular; if constipated, correct with fruit or some simple drink in the morning; if a diarrhœa set in, it is usually due to errors of diet; correct the error, clear out the canal with some simple saline laxative and follow, if needed, with a small dose of Dover's powder. Remember that *rest* is the great

curative principle which underlies medicine. * * * Great care is needed in convalescing from certain acute diseases, for example: rice must be avoided in getting up from *Beri-beri*, and the amount of animal food increased; in convalescing from tropical dysentery, just the opposite-all animal food is to be avoided, even milk. After yellow fever the greatest care is needed in diet; the physician's orders must be followed religiously. * * * When exposed to malarial or vellow fever 2 grains of quinine taken twice a day, after eating, is a wise precaution. A combination commonly used in Brazil as a protection from yellow fever is: one grain of quinine and one-sixteenth of a grain of arsenious acid, in pill form, taken twice or three times a day, always after eating. * * * If attacked by any of the numerous forms of malarial fever and a doctor is not at hand, what is to be done? Livingston's treatment was: 4 grains of quinine, 4 grains of calomel and 6 grains of the resin of jalap, at one dose; rather heroic, but wonderfully efficient; if this does not act in 4 hours take a brisk enema; this is followed by 4 grains of quinine every 4 hours, 3 every 3 hours or 2 every 2 hours, till 12 grains have been taken.

Stanley and other travellers followed this plan. Gordon relied upon Warburg's tincture. The equivalent of this is now put up, by the Upjohn Co., in pill form. The equivalent of an ounce has in it 9 grains of quinine. It is nonsense to think that you cannot take quinine or that it is harmful; it is the sheet anchor in tropical fevers of malarial origin. * * * Coffee is the ideal stimulant of the tropics. We only know of one great traveller who recommends alcholics. Coffee may be carried in a fine powder closely packed or as a strong extract; only a little hot water-or even cold-is needed for a refreshing cup. * * * Keep the head cool; there is a peculiar danger in the sun's rays, not exactly from the heat, but something in the solar spectrum that works a sort of sun traumatism,---* * * Wear a pith hat or carry a sun umbrella; a species of solar X-ray. in travelling, put green leaves in your hat or arrange a diaphram and ventilate the top. * * * All wounds must be kept scrupulously clean and well pro-* * * In tropical diarrhœa of specific origin, i. e., any diarrhœa that tected. does not yield to the measures already mentioned and a few days rest, with liquid diet, a physician should be called, * * * Tropical dysentery is best treated by massive doses of powdered ipecacuanha. * * The next great bug-bear of tropical life is *liver disease*. In the main it is due to high living or carelessness,--inordinate eating and drinking, inattention to the bowels, lack of exercise and exposure; and may be avoided. It must be remembered that there is some degree of congestion of the liver after every meal, the heavier the meal the greater the congestion.

Heavy dinners, with wines and inattention to the bowels, if often repeated, will produce acute congestion, tissue change and fatal complications. We are persuaded that most of the liver complaints of the tropics are avoidable. * * * Wear a Yaeger-band, drink no spirituous liquors, do not get chilled in cold baths or by exposure, abstain from inordinate quantities of animal food, keep the bowels open by a well regulated diet and exercise, go to bed at reasonable hours, and your liver will be all right. * * * Danger from the bites of poisonous insects and reptiles is not a very importent element,—still they are worth consideration. The various forms of *filaria*, causing *elephantiasis* and chronic *chiluria*; and certain intestinal worms, particularly the *ankylostomum duodenalis*, which produces the fatal anemia of the tropics, etc., must be left to the physician.

The *chigger*, both an annoyance and a danger, is a *flea*,—the *pulgans penetrans*. It burrows under the skin, usually about the toes, deposits eggs, which, if not removed, hatch and give trouble. As soon as detected, which is usually not till the eggs are deposited, it should be removed with care. The native servant can usually do it without breaking the sack or injuring the tissues. Serious inflammation sometimes follows the unskilful removal of the little pest. * * * Flies and mosquitoes: The house-fly of the tropics is the *muscus vomitorius*, and not the innocent *m. domesticus* of our homes,—if you chance to swallow one with your food, you will soon find out what kind of a fly it is * * * A simple mosquito bite sometimes leads to serious complications, hence, when practicable, put screens to your windows and netting to your bed. It is wise to carry a little bottle of *aqua ammonia*, when travelling, for the bites and stings of insects. * *

There is hardly any limit to what may be said about the care of the health, the management of children and the hygiene of home life, in the tropics. Most of the advice would, however, apply equally well to life in this country, especially in the Southern states. Most of the exclusively tropical diseases may be avoided, —beri-beri rarely attacks the new comer. If proper attention be paid to the general health, keeping up a vigorous tone and not getting frightened, there is little danger from yellow fever, even. Colds are more common in the tropics than in the temperate zone, and the percentage of deaths from lung diseases, greater. Exposure is more likely to bring on rheumatism, and complications resulting from it are more frequent.

Keep the head cool, the feet dry and the bowels regular, be reasonable in your diet, avoid alcoholics, and you will have minimized the risks of living in the tropics.

JOHN THERON MACKENZIE.

JOHN THERON MACKENZIE, the founder of Mackenzie College at S. Paulo, Brazil, was born in the town of Phelps, Oswego County, N. Y., July 27th, 1818. He attended school in his native town, and later went through the Academy at Canandaigua. After leaving the Academy he entered the office of the late Judge

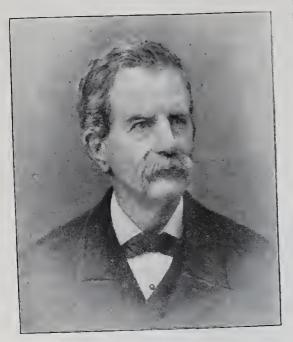


Mackenzie College.

Lyman Sherwood, with whom he studied law until admitted to the bar. His career as a lawyer was wonderfully successful and he was highly respected as a

man of ability and unswerving integrity. Later in life he practically retired from professional work and took up his residence in New York City.

His father was of Scotch parentage, but born in the Southern States; his



John T. Mackenzie,

mother was of old New England stock, born in Lenox, in the Berkshire Hills of Massachusetts. The family consisted of four sisters and one son, the subject of this sketch. Of the sisters only one, the youngest, survives.

The father was a devoutly religious man and was very fond of his only son, speaking of him as "Johnny, the little missionary," fondly hoping the lad might be called to the ministry. Later in life when the devout father had passed away and little Johnny had acquired a competence as a successful lawyer, the remembrance of his father and the old endearing title a "little missionary " came to him as an incentive to do something for missions, even though he did it by proxy.

He travelled extensively in the Old World and his attention was constantly attracted to the igno-

rance, superstition and poverty of the masses in Italy, and the lack of Christian culture in what should have been the most Christian of all countries. This spectacle of a lapsed Christianity affected him deeply and he determined to honor his father's memory and satisfy his own convictions by establishing, somewhere, a college where the Bible should be the foundation of education. After, at least one unsuccessful attempt to carry out his idea in Europe, he heard of the work that was being done by the Protestant College at S. Paulo, Brazil, shortly after the fall of the Empire; a staunch American, his heart went out to the youngest of American Republics, and he saw, at once, the value to the nascent Republic of having its youth grounded in a knowledge of God's word. Without special solicitations on the part of the College, he offered spontaneously to the Trustees of the Protestant College the sum of \$50,000 with which to erect a building "to "be known as Mackenzie College," and to be maintained as an institution of " learning based on the Protestant Bible., where in each department shall be " daily and properly taught the teachings of Jesus Christ and his Apostles as "recorded in said Bible." Of this sum only \$42,000 was received. While the College was in course of construction, its founder was stricken by apoplexy and died September 17, 1892.

A just and honorable man, a faithful son and brother and a simple, unaffected Christian, though a professed member of no church, John T. Mackenzie was moved by an affectionate remembrance of his father and profound personal convictions of the inestimable value of God's Holy Word as the only foundation for individual or national character, to leave a lasting monument whose influence for good on coming generations of the youth of Brazil it is difficult to estimate.

There is only one surviving sister, who resides at Sodus Point, and who holds her brother's memory and wishes in tenderest regard.

The College was built, and has been occupied since 1894, carrying out the wishes

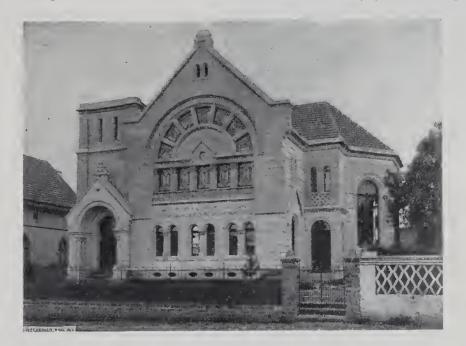
of its founder in the letter and spirit.

THE NEW PRESBYTERIAN CHURCH AT CORITYBA, STATE OF PARANÁ.

When a foreign missionary is sent abroad to any field of labor, it is certainly with the expectation that, some day, he will complete his work and be able to report for duty elsewhere. In foreign missions, as in everything else, there must be a natural process of growth and development, a definite outcome of the work which determines its limits. The time must come when Christ has been preached to all, when a certain number have accepted Him and a church has been formed; when some one of the number will have obtained sufficient knowledge of the Scriptures to become its pastor and be supported by it.

This is the end of foreign missions as an evangelizing agency in that place.

The evangelization of the State of Paraná was begun by Rev. Robt. Lenington in 1884,—Corityba was occupied by Rev. G. A. Landes in Nov. 1885. Revs. Carvalhosa and Porter have had some part in the work, the former being left in charge during Mr. Landes visit to the United States in 1889–90, rendering most



valuable services in the wide interior field. Rev. Mr. Landes has just left Corityba, after seeing the full fruition of his efforts, the growth, natural development and logical outcome of successful mission work. He leaves Corityba with an organized Presbyterian church of more than 150 active communicants, a church edifice, paid for; a talented native pastor, supported by the church; a self-supporting church and a native pastor, ready to do aggressive evangelistic work,—this is the crucial test of good mission work. It is the only admissible demonstration of efficiency, and is the natural line of cleavage between the tutelage and support of foreign missions and the independent life of the native church.

The missionary was sent to do a specific work. He has done it well and moves on to other fields and repeats the process indefinitely. When the missionary thus passes to the front, there are several classes of work that were adjuncts and auxilliaries of the evangelist that do not follow him or fall into the church, but which, for economic and other obvious reasons, remain independent and continue their work as institutions growing out of mission principles, but following an entirely different course,—among them is education, schools, colleges, etc.

THE BRAZILIAN BULLETIN.

REPORT OF THE MINISTER OF FINANCE.

We have before us the report of the Secretary of the Federal Treasury of Brazil, Dr. Bernandino de Campos. It is a complete review and analysis of the finances of the country under the Empire and the Republic—full and frank, assuming for the Republic the full measure of responsibility for the errors of the new Government, but showing clearly the origin of the burdensome foreign debt in 67 years of continuous deficits:

In the matter of the balance of trade he shows that the total value of exports in 1897 was	£.26,752,224 21,567,660
Showing an apparent balance in favor of exports of From this, however, he deducts payments abroad, in gold or exchange, for account	
of government, exclusive of remittances for imports, amounting to	£9,644,614
Leaving a real balance against the country of	£,4,460,050

The losses on exchange due to depreciated currency, the increasing deficits under the Empire, the foreign debt and the intolerable burden of it under existing conditions; the dangers of the irredeemable paper currency, etc., are gone into with a thoroughness and honesty characteristic of the man.

In the closing paragraph he states: "The report has sought to explain the financial, commercial and economic situation of the country with all candor and truthfulness.

* * * * * * * * * * * * *

"It is necessary to consider two things. First—A plan of general and permanent reorganization, which shall in time furnish an adequate remedy. Second—A plan to meet the immediate and urgent demands of the moment as a temporary expedient, to relieve the present intolerable strain."

"The present temporary plan of relief does not in any way interfere with the plans to be adopted and measures to be taken for permanently disposing of the vexed question and the taking of adequate steps to reorganize the country's finances and economics on a sound basis."

CULTIVATION OF FOOD PRODUCTS IN BRAZIL.

Our advices from up country are to the effect that the cultivation of food products has very largely increased, and that an increasing interest is shown by planters generally in this subject. The sale of seeds is also steadily increasing, which is a healthy sign. All this is highly satisfactory. There may be less cash profit in the cultivation of most of these products, but the country at large will derive a much greater benefit from it than from the cultivation of some such product as coffee or sugar. The production of foodstuffs, especially at the present moment, would have a two-fold beneficial effect, for it would not only give employment to small cultivators and cheapen food, but it would diminish the volume of imports, reduce the balance against the country in its international trade, and thus help to improve what is called the "exchange rate." Thus every farmer and gardener will be contributing his mite toward effecting a result, by natural means, which ministers and bankers have thus far been unable to influ-

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ence. It is, after all, a much simpler problem than most men think, and it is influenced very considerably by these simple matters of food production, of industrious habits, of personal initiative, enterprise and thrift, and of the retention and employment of profits in the country. The planter who resides abroad, and spends there all the profits of his estates, is doing his country no good, and, in critical times like those through which Brazil is now passing, he is certainly doing the country an injury. It should be the principal concern of the Government and of the planters, therefore, to promote the cultivation of a wide variety of products, especially of those imported for general consumption. It should also be one of the chief concerns of the Government to find employment for the masses, and to some extent gardening and small farming will accomplish this. If lower rates on railways and coasting steamers and better market regulations will help to develop such industries, let the Government see that such reductions are made. At present everything appears to be against them, for transportation rates are high, the taxes on those who sell such products are high, and the markets are generally in the hands of monopolists who favor high prices. really patriotic movement would be that of cutting up various large estates into small holdings, selling or leasing them on favorable terms, and then providing cheap transportation and free markets for their products. It would very soon affect a transformation in this country which no one dares to hope for under present conditions.-Rio News.

REV. A. G. SIMONTON.

* Rev. Ashbel Green Simonton, the youngest son of Dr. William and Martha (Snodgrass) Simonton, of West Hanover, Pa., was born January 20, 1833. His father and paternal grandfather were physicians and men of note. His mother was the second daughter of Rev. James Snodgrass, for fifty-eight years pastor of the Hanover Presbyterian Church in Dauphin Co., Pa. She married Dr. William Simonton in 1815.

When Ashbel was baptized, his father, who was an ardent admirer of the late Rev. Ashbel Green, D.D., one of the presidents of Nassau Hall, now Princeton University, gave him the name of the good man, "in the hope," as he expressed it, "that his son would some day become a Dr. Green."

His education began in the Harrisburg (Pa.) Academy. After completing his preparatories, he entered Princeton, where he took a full course, and was graduated in 1852. His scholarship was much above the ordinary level. In the Fall of the same year he went South with his brother James, and took charge of an academy for boys in Starkville, Miss., where he taught with much interest and success for a year and a half. During this period he greatly endeared himself both to his patrons and pupils, and formed acquaintances and friendships which were afterwards renewed in Brazil, South America.

He returned to Harrisburg, Pa., where the family resided, in 1854, and entered upon the study of law.

We pass over the interesting period of his conversion, his abandonment of law and entrance upon the study of theology at Princeton Seminary, his licensure and application to the Board of Foreign Missions. His appointment to Brazil was made, and he was ordained April 14, 1859, and departed for his new field of labor, arriving in Rio de Janeiro August 12, 1859.

He was warmly received by the little group of English and American families, and by merchants to whom he brought letters.

While acquiring Portuguese, the first requisite to being able to reach the natives of Brazil, he took up work among the English and American seaman who frequented the port in large numbers, preaching frequently on ship-board.

It was the writer's privilege to make his acquaintance in the first days of his arrival in Brazil and begin a friendship that only ended with Mr. Simonton's death, and he can testify to the rapidity and thoroughness with which he acquired the language.

In 1861 he began a Bible class, and soon after, a week-day evening service. In January, 1862, he organized a church, and the Lord's Supper was administered for the first time. Three person's were received on profession of faith, among them one Portuguese. Services were now conducted in Portuguese, the English service being taken by Rev. F. J. C. Schneider, who had been sent out in 1861. Rev. A. L. Blackford and wife,—who was Mr. Simonton's sister, had arrived in 1860.

In 1860 he made an extensive journey through the interior, exploring the then province of S. Paulo, distributing Bibles and tracts wherever he went. He reported to the Board his observations and advised making S. Paulo the centre of work for that part of Brazil.

Towards the close of 1862 he made a visit to the United States. It was during this visit that he made the acquaintance of Miss Helen Murdock, daughter of Wm. F. Murdock, Esq., of Baltimore, Md., to whom he was married March 19, 1863. He sailed with his wife for Rio May 23, 1863, which place he reached July 16. It was the writer's privilege to be a fellow passenger on this voyage, which drew still closer the bonds of friendship already existing. August 9 there were eight additions to the church in Rio, four of them Brazilians.

The work was now well begun and it was deemed wise to expand it. Mr. Blackford and wife, therefore, went to S. Paulo. This was an important departure, one around which great events of mission work was destined to cluster. It was the University town of the empire and a center of culture.

In June, 1864, he was called upon to suffer the loss of his wife, who died, leaving him an infant daughter. He presented to his friends the pathetic spectacle of a strong Christian man, in the midst of trying work, deprived of a loving wife when he most needed the comfort and support of her presence; struggling heroically up towards his work, with meekness and resignation, but crushed as only men are who love the Chief bearer of comfort or joy. He buried himself in his work, giving away to no morbid feeling, but with greater zeal and completer consecration, threw every energy into the cause of Christ. The Imprensa Evangelica (Evangelical Press) was started and a discussion of religious liberty entered upon that challenged the admiration of scholars and statesmen, by its broad grasp of the subject, and liberal Christian spirit, as well as fairness and courtesy. His command of Portuguese was wonderful. The sermons preached during this period have gone into the literature of the country as models of expression and reasoning.

At first, the Roman Catholic organs paid no attention to the little Protestant paper, but soon they found they had an opponent who compelled attention.

The work in S. Paulo prospered. In 1865 he made an extended tour through the province and other parts, where his work was productive of great good.

The effects of the constant strain, the seeking relief from sorrow and perplexities in the intensity of constant work, began to tell on his vigorous constitution. While on a visit to his sister and his little daughter in S. Paulo, in November, 1867, he was taken sick and passed to higher service, December 9, 1867. During his last moments, when asked if he had any message for his friends: "Nothing special; tell them I loved them to the end." Had he any to the Board? "Tell them to go on with their work." Any for the Brazilian Church? "God will raise up another to fill my place. He will do His own work with His own instruments." To his grief-stricken sister he said: "We can only lean on the everlasting arm." He entrusted his child to her. It was again the writer's privilege to be with the beloved friend in the closing scene. Thus passed away the pioneer of the Presbyterian Mission in Brazil.

He was a man of rare parts—in personal intercourse, frank, genial, social, affectionate and noble hearted. He loved his friends, "loved them to the end."

In public he was unaffected, dignified and self-possessed. His voice was clear and full, his delivery rapid and his tone commanding. Of medium height, with a good, though rather slender figure, a well proportioned head, regular features, an intelligent and animated expression of countenance, his appearance presented an assemblage of attractions highly prepossessing.

He excelled as a preacher, clear, forcible and logical, he took hold of fundamental truths with a firm grasp and set them in their proper relation to each other and to the wants of his hearers. In style at once simple, natural and accurate, charming and effective.

*We have compiled and copied with great freedom from an admirable sketch published in Wilson's Historical Almanach of 1868.

GOLD MINING IN BRAZIL.

There is, we believe, no industry in the country more neglected, or that is likely to give better returns to foreign capital, than mining; and it is always with satisfaction that we hear of new departures in this direction. Minas Geraes has for centuries been known as a great gold and diamond producing area. Indeed, 200 years ago it was the most productive gold field in the world. The Portuguese Government, however, undertook to kill the goose that laid the golden eggs by clapping on a 20 per cent. royalty as its share of all gold extracted, so that as soon as the surface placers were exhausted mining became unprofitable, and the yield fell off to an insignificant figure.

About 1830 a revival took place, when English capital commenced to interest itself in Brazil, and several mines were reopened, with extremely satisfactory results in some cases and failure in others. The refractory nature of the ore, the great distance from the coast, and costly communications, made mining at that time both difficult and risky; while the "peculiar institution"-slavery-placed another and almost insuperable difficulty in the way of British capital. All that is altered now. Railway communications connect the mining districts with the coast, and freights are most moderate; slavery has disappeared, and free labor is cheap and tolerably abundant, while the methods of mining have undergone such a revolution that ores incapable of profitable treatment a few years ago, are to-day perfectly tractable, and yield big profits. That the introduction of the chlorination and cyanide processes will prove as beneficial in Minas as it has in other gold fields, there can be no question. The ores have always been regarded as peculiarly refractory, owing to the large percentage of pyrites, and the loss of gold particularly heavy, often as much as 25 per cent. This the Morro Velho Company has already reduced considerably, and, with further experiments and more perfect appliances, expects to get down to 5 per cent. or 6 per cent.

When the extraction of the gold from the refractory Minas ores has been practically demonstrated on a large scale we anticipate a boom in Brazilian mining that will rival South Africa or Australia. The gold is here, there is no doubt of that, only awaiting capital, energy and science to extract and make it productive. Every gold field in the world had its boom except this, but our turn cannot be far off now, and, when it does come, those that had the sense to get hold of likely properties, at the present nominal prices, will not fail to reap their reward. A very good property, known as the Carrapato Estate, is about to be offered on the London market, which we trust will be a forerunner of many others.

The Carrapato property is situated right in the heart of the richest mining district of the country, where mining has been carried on for centuries, and in the neighborhood of the well-known St. John del Rey, Gongo-Socco, Rossa Grande, and Minas and Goyaz working mines.

The Central Railway passes right through the district, within fifteen miles of the mine itself, so that communications are now very different to what they were when the Ouro Preto and D. Pedro mines were started some years ago. The property is well timbered, whilst the streams that traverse it can be made to supply about 60 to 70 H. P. for motive power.

The reports of two well-known Englisn experts, which have been shown us, leave little doubt of the valuable nature of the property. The principal workings are known as the Mina Alta and Mina Baixa. The Mina Alta is a well defined reef, striking East and West, and dipping 25 ° South, and appears to be some twelve to fifteen feet thick. The gangue consists of highly pyritic quartz, the country rock being foliated micaceous, talcose, and graphitic schists.

This mine was profitably worked for some years until 1888, when, owing to the careless method of understopping, a cave took place, and work on this mine was entirely suspended.

The Mina Baixa appears not to be a reef at all, but an interstratification in which the gold has been concentrated by the impervious nature of the close chloritic strata that form the foot wall. These workings are a depth of 325 feet below the outcrop. A large chamber has been excavated, 125 feet wide by 8 to 15 high, and, as far as can be judged, the deposit seems likely to continue down and latterly. In spite of the considerable amount of work down there is no dump, a proof of the uniform character of the ore.

Labor is good and cheap, first rate miners, Italian and Brazilian, being obtainable at two to four shillings per diem.

Assays of the ore taken at the Minas and Goyaz Company's laboratory are certified to have given the following results:

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	4	66	"	6.6	6.6		3	ΙO	14
6.6	5	Centre	"	66	6 6		I	ΙO	8
4 6	6	6.6	66	6.6	6.6		I	4	6
66	7	6.6	66	6 6	4.4			I 2	20
• 6	8	6.6	6.6	6.6	6.6			16	ΙO
" "	9	Dump	4.6	6.6	6.6		I	2	4
4.6	10	"	6.6	66	66		1	8	ΙO
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The property seems a good one, and that can be safely recommended to the attention of capitalists. Of such properties there are thousands scattered up and down the country, that only await energy and capital to develop them. It is enterprise of this kind that is so badly wanted, and that Government should spare no trouble to attract.

The annual output for the whole of Brazil is estimated at only 108,000 ounces, or less than that of the British or French Guiana, and scarcely half of a single month's yield of the Rand.

When the output is 200,000 or 300,000 ounces per month, as we firmly expect to see it, there will be an end of crises, and of their origin—paper money. The true means of improving our currency is to increase our gold output.

Should this mine yield anything like this on a large scale there can be no doubt of the future. The property is decidedly interesting and can be safely investigated by foreign capital on the look out for a good dcal.

-Brazilian Review.

IRACEMA.

A LEGEND OF CEARÁ: BY JOSÉ DE ALENCAR.

I.

Beyond, far beyond the mountain range which showed against the blue horizon, was born Iracema, a maiden of beauty rare, and fleet-footed as the emu, as she roamed thro' the woods of Ipu, where dwelt her warlike tribe of the great Tabajara nation,

One day she threw herself down to rest in the forest. The leaves of an oitycica tree threw their cool shade around her, while the birds sang in its branches.

While she rests she feathers her arrows with the plumes of the gará, and sings in harmony with the sabiá of the woods, perched on a neighboring branch.

A handsome parrot, her companion and friend, plays near her, at times he mounts the branches of the tree and thence calls the girl by name, at other times he plays with the basket of colored grass, in which she carries her perfumes, her her white threads of crautá, the needles for making lace, and the dyes with which she colors the cotton.

A sudden noise breaks the quiet stillness of her siesta. The maiden raises her eyes, that the sun cannot dazzle, with troubled gaze. Before her, lost in admiration, stands a warrior strange, if warrior he be, and not some evil spirit of the woods. His face is white as the sands of the sea shore, his eyes blue as deep waters. Strange are his dress and accoutrements.

Quick as a glance was Iracema's motion. An arrow flew from her bow, and drops of blood jet from the stranger's face. At the first impulse his hand fell on the hilt of his sword; then he smiled. The young warrior had learned the religion of his mother, where woman is the symbol of tenderness and love. He suffered more in spirit than from his wound. Moved by the expression in his eyes, the girl threw aside her bow and quiver, and ran toward the warrior, sorry for the pain she had caused. The hand that had been quick to wound was quicker to staunch the flowing blood.

Then Iracema broke the murderous dart, giving the shaft to the stranger, keeping for herself the point.

The warrior said: "Do you break with me the arrow of peace?"

"Who taught you, white warrior, the language of my brethren? Whence came you to the woods which never beheld another like you?"

"I come from afar, daughter of the forests, from the lands which your brethren used to hold, but which to-day belong to mine."

"Welcome stranger, to the fields of Tabajáras, lords of the villages, and to the cabin of Araken, the father of Iracema.

The stranger followed the maiden across the forest, and at sunset they saw in the valley the village, and beyond, on a cliff in the shadow of some tall trees, was perched the cabin of the medicine man. The old man was smoking at the door, seated on a mat, meditating upon the sacred rites of Tupan. The light breeze tossed his long white locks as he sat immovable, almost lifeless. The chief was deceived in the two figures which approached, thinking that he saw the shadow of a single tree stretching across the valley. When the traveller entered the shade of the grove, then his eyes, like the tiger's, accustomed to darkness, recognized Iracema, and saw that she was followed by a young warrior of strange race and from distant lands. The Tabajáras from beyond Ibiapaba had spoken of a new race of warriors, white as the flowers of the rubber plant, and coming from a distant country to the banks of the Mearim. The old man supposed that it was one of these warriors who now trod his native fields. Quietly he waited. The girl pointed to the stranger and said: "He has come, father." "Tis well. 'Tis Tupan who brings the guest to the cabin of Arakan.'' Speaking thus the priest handed his pipe to the stranger and both entered the hut. The youth seated himself in the principal hammock which hung in the center of the dwelling. Iracema lit the fire of hospitality and brought what provisions they had to satisfy hunger and thirst. She brought the remnants of game, some farina, forest fruits, honeycomb, and pineapple wines.

Then the maiden came with the jar of cool water from the nearest spring to wash the hands and face of the stranger. When the warrior had finished his meal the old chief lit his pipe and said: "You have come." "I have come," replied the stranger. "Welcome. My house is at your service. The Tabajáras have a thousand warriors to defend you and women without number to serve you. Speak, and all will obey you."

"Chieftain, I thank you for the shelter which you have given me. As soon as the sun rises I will leave your cabin and your fields whither I have strayed; but I ought not to go without telling you who is the warrior whom you have befriended."

"'I is Tupan whom I have served. He brought you; he will take you away. Araken has done nothing for his guest; he asks not whence he has come or when he goes. If you wish to sleep, may bright dreams be yours. If you wish to speak, your host listens."

The stranger said: "I am one of the white warriors who have built their homes on the banks of the Jaguaribe near the sea, where dwell the Pytiguáras, enemies of your nation. My name is Martin, which in your language would mean son of a warrior; my blood is that of the great nation which was the first to see your country. My companions returned by sea to the banks of the Parahiba, whence they came, and their chief, deserted by his followers, now crosses the great plains of Apody. Only I remain of so many, because I was among the Pytiguaras of Acaracú, in the cabin of the brave Poty, brother of Jacaúna, who planted with me, the tree of friendship. Three days ago, we went hunting, and I, losing my way, have come to the fields of the Tabajáras.

"Twas some evil spirit of the forest who blinded the white warrior in the darkness of the woods," replied the old man. While they talked, night stole over them, and with a murmured benediction,

While they talked, night stole over them, and with a murmured benediction, the chieftain priest withdrew. The Tabajáras from the mountains had come on their way to fight the Pytiguaras, and were about to ask the blessing of Tupan upon the enterprise. The white warrior saw him disappear in the distance and then started to find his way home—but ere he had gained the edge of the valley and was about to enter the forest, the form of Iracema rose before him.

(To be continued.)

RELIGIOUS INSTRUCTION IN SCHOOLS.

SUGGESTIONS FOR THE TWO LOWER PRIMARY ROOMS.

Fifteen minutes may be profitably devoted to devotional exercises in the four primary rooms, while ten minutes are sufficient for the Intermediate and Grammar grades.

There should be a reverent spirit, without undue solemnity; this will be easy if the teacher cultivate a tender, reverent spirit herself.

I. Short, simple stories may be compiled from the Bible and told to the children by the teacher,—not hap-hazard, but observing some sort of chronological order, that the knowledge so obtained may be used to build to, in the other grades. The great events and principal characters of the Bible—Life of Jesus, The Creation, Adam and Eve, Noah, Joseph, Samuel, etc., can always be made into simple stories, attractive to children.

2—The hymns must be simple and easy to learn, in order to early cultivate a spirit of adoration and praise. The following are some that have been used in the past:

"Deixae os meninos." (Suffer the little children.")

"Vinde, meninos." (Come to the Saviour.")

"Quão linda a historia." ("I think, when I read that sweet story.")

"Sei que Jesus me quer bem." (Jesus loves me, this I know."

Eis os anjos a cantar." (Hark! the herald angels sing.")

As far as possible, the hymns should harmonize with the lesson story, or illustrate Scripture texts taught.

3-The following are examples of what may be committed to memory:

" In the beginning God created the heavens and the earth."

"God so loved the world that He gave His only begotten Son."

" If ye love me, keep my commandments."

"Thou shall love the Lord, thy God, with all thy heart."

"And with all thy soul and with all thy mind and thy neighbor as thyself."

"Whatsover ye would that men should do to you, do you even so to them."

"This is my commandment, that ye love one another, as I have loved you."

"Speak every man the truth to his neighbor.

"And Jesus said, 'Suffer little children to come unto me, and forbid them not: "for of such is the kingdom of God."

"I am the Good Shepherd."

"Glory to God in the highest," etc.

4.—The prayer must be very short and simple; the following is a good example: "Nosso Pae, que estàs no Ceo, ajuda-nos a amar-te e a quardar teus mandamentos, por amor de Jesus. Amen." "Our Father, who art in Heaven, help us to love Thee and keep Thy commandments, for Jesus' sake, Amen."

The selection and distribution of the parts of the exercise must be left to the ingenuity of the teacher. It should be the most attractive part of the school-day.

It is in this department that the most careful work is done, that processes and results are studied and compared, and the foundations of future work are laid. Here it is that we have a specialist,—an expert in child-teaching,—an earnest and capable Christian woman, whom we found in active and efficient work in this country and took to Brazil; associated with her are skillful Christian teachers, for the most part educated and converted in the school. Here, with tender and reverent care, Truth is taught, the Word of God is related to the child's life and the foundations of a sound education are laid.

[To be Continued.]

BRIEF HISTORICAL NOTE OF THE PROTESTANT COLLEGE AT S. PAULO, BRAZIL, EMBRACING "MACKENZIE COLLEGE."

The College was incorporated by the Board of Regents of the University of the State of New York in July, 1890. The purpose which the trustees had in view in seeking incorporation in this country was to extend and perpetuate the type of Christian education commenced by the Presbyterian Mission in 1870, form an institution of learning of high grade, which should represent the American type of higher education and the American' theory, that the ideal school is the ideal community, and thus give to Brazil a complete system of American schools on a Christian foundation.

Permission had been granted to the Mission in 1880, by the General Assembly of the Presbyterian Church in the United States of America, to found, at S. Paulo, Brazil, an undenominational Christian College, and this was it. The mission school had grown into a complete graded system of primary, intermediate, grammar and high school instruction with more than 500 pupils of both sexes, having a Normal class for training its own teachers, a manual training shop under skilled direction—the first and only one in Brazil—and a Kindergarten, also the first one in Brazil. It was patronized by all classes and had more applicants than



College Residence.

places. Out of it had come, largely, the reorganization of the public schools on the American model. The time had come to provide an American College for the pupils of the American school who had finished the graded course, and for as many others as cared to come, and could pass the entrance examinations.

As soon as it became certain that the College could hold property in Brazil under its New York charter, the Board of Missions turned over to the trustees about four acres of land, which had been given by the Rev. G. W. Chamberlain and wife, and two buildings, one used as a boarding house for about forty pupils of the school; the other, built with funds given by John Sinclair, Esq., of New York, and in use as a manual training school. Through another donation of 5,000 square meters of land, by Rev. and Mrs. Chamberlain, a gift of \$2,500 from Col. J. J. McCook, of New York, and funds solicited in the United States, contiguous properties were added, making the total land holdings of the College to-day 34,482 square meters, or about 8.6 acres, located in what was formerly a suburb of the city of S. Paulo, but now within city limits and in a populous neighborhood. This land has enormously increased in value, being now worth two hundred times its original cost.

In 1891, John T. Mackenzie, Esq., of New York City, offered to the College \$50,000 for the erection of a three-story building, to be known as Mackenzie College and to be occupied in connection with the work of the Protestant College. Of this amount only \$42,000 was received before his death. With this money a fine building was erected after the general style of the Mark Hopkins Memorial Hall at Williams College. This is now the main College building, occupied for recitations, lectures and laboratory, the third story being also temporarily used as a dormitory. In 1894, an additional house was built for the smaller pupils of the lower school, with funds given by Dr. Gunning, of Edinburgh, Scotland. In 1896, a refectory was built for the college students.

This, with the house occupied by the President, and a small house on the land purchased by Col. McCook's gift, constitutes the property now held, in fee simple, by the College.

The College was opened in 1892, with a small class of students who had completed the course in the Mission school, taking up the equivalent of the Senior preparatory work of the American academy.

It was found that students entering from other schools came very poorly prepared as to their ability to study, though they could pass our entrance examination, and that the class could not be held up to severe college work without a larger proportion of students trained in American methods of study; for these reasons a *second* preparatory year was added and the sequence of classes interrupted until a larger group from the lower school could be ensured. At the beginning of 1894, a strong class came up, which has since been doing satisfactory work. This was the real beginning of the College. We are now assured of an unbroken succession of classes advancing regularly towards college entrance. The rate of increase has been thirty-eight per cent. per annum, in spite of a high standard of entrance examinations, for all who have not come regularly up through the graded course, and the high grade of work demanded after entrance.



A Glimpse of the Day- School.

In 1895, the Board of Foreign Missions transferred to the College the entire control of all departments of the mission school, as well as control of the property, thus unifying the work of education. The mission schools at Bahia, Larangeiras and Curityba are administered as branches.

The total enrollment for 1807, in all departments, was 528 pupils and students; of this number 60 were in the College. The class in full work from the beginning of the year was 54. Six who had been conditioned in the beginning of the year were able to enter the class in July. The branches at Curityba, Bahia and Larangeiras have over 400 pupils.

BOARD OF TRUSTEES.

THE BRAZILIAN BULLETIN.

FACULTY OF THE PROTESTANT (MACKENZIE) COLLEGE, AT

S. PAULO, BRAZIL.

MACKENZIE COLLEGE.

H. M. LANE, M. D. WILLIAM A WADDELL P. A. C. F. D. D. W. L.	Dunaidant
WILLIAM A. WADDELL, B. A., C. E., Ph. D. (Union)	President
AUCUSTUS F CHANNELL, D. A., C. E., Fli. D. (Union)	Dean
	D
LORENZO C. LYON, M. A., (Princeton)	registiat
Rev. M. P. B. CARVALHOSA, (Mission Seminary, 1872).	Librarian
DDA NGLED, CHIRVILLIOSA, (MISSION Seminary, 1872).	
FRANCISCO RODRIGUES DOS SANCTOS SARAIVA Lit D and D C L	

(Coimbra, 1850).
ANTONIO DE BARROS BARRETO, (Lieut. Br. Naval School).
ERNEST CAPERAN B. L. (University Toulouse, France).
ALBERTO LOEFGREN, (Univ. Stockholm, Sweden).
A. R. ALDRIDGE, (Kingston, England).
LOIUS RITTERBUSH, (German-American Normal School, Milwaukee, Wis.)
CHARLES A. ARMSTRONG, (Winchester, Eng.).
EDUARDO WALLER, (Näas Slöjd-Seminar, Sweden). A, LIL D. and D. C. L.

Occasional lectures on scientific subjects from outsiders.

INSTRUCTORS OF NORMAL CLASS.

H M LANE M D Methods and Courses
H. M. LANE, M. D. Director Pedagogics; Portuguese Literature
R K LANE (Adolbert)
R. K. LANE (Adelbert)
MINC, SUPPLIA YUNKEK
Mme. E. CARVALHO (nee Hess)
BENEDICTO DE CAMPOC
DENEDICIÓ DE CAMPUS
Rev. M. P. B. CARVALHOSA Bible; Commercial Branches
Dible, Commercial Diancies

CORPS OF TEACHERS IN THE GRADED PREPARATORY SCHOOL.

MISS SCOTT, in charge of Primary and Intermediate Rooms.

H. M. LANE, Principal. R. K. LANE. MISS MINNIE BAXTER. MISS MINNIE BAATER, MME. YUNKER. MME. CARVALHO. FRAULEIN CLOTILDE SPIERLING. MISS EVANGELINE ADAMS. MISS ADA LINDSEY. D. BELLA D. CARVALHOSA. D. EDUARDA DE MELLO. D. MARGARIDA DE CAMARGO.

D. MARIA PORTUGAL D. MARIA TORTOGAL. D. MARIANA RIBEIRO. D. BEATRIZ TRULHOS. D. MANOELITA PEREIRA. D. ADELIA RIBEIRO. D. ADELIA RIBEIRO. MISS JESSIE JUSTICE, In school at Bahia, temporarily. MISS NELLIE JUSTICE, In school at Bahia, temporarily. Rev. M. P. B. CARVALHOSA. BENEDICTO F. DE CAMPOS.

ASSISTANTS.

AMELIA DE SOUSA. ADA LOEFGREN.

IDA ORECCHIA. NOEMI DA CUNHA.

Eleven of these teachers and the four assistants were entirely educated in the school, from primary school to end of Normal course

THE COLLEGE YEAR.

Being situated in the Southern Hemisphere the *long* or summer vacation comes in December and January, and the college year corresponds to the calendar year. The year is divided into two semesters; the first beginning on the first Wednesday of February and closing on the last Thursday before the 23rd of June; the second beginning on the first Tuesday in July and ending on the last Thursday of November. The school year is identical with that of the college, except that it begins two days carlier and closes a day later

earlier and closes a day later.

The national holidays of Brazil and the religious holidays of the Church Universal are observed.

ENTRANCE EXAMINATIONS.

Examinations are held on the Monday and Tuesday preceding the opening of the first semester and the Monday preceding the second semester for those students who were *conditioned* at the beginning of the year. A student may not be conditioned in more than two studies and these must be made up by the end of the first semester.

THE BRAZILIAN BULLETIN.

COURSES OF STUDY.

The college conducts a six years course under one administration and with the same faculty. This course is divided into two sections of three years each. The first consists of two years of High School work and the *Freshman* year of the American system and is known as the *Curso Superior*, or *Gymnasium*. It is all strictly required work and completes the *Disciplinary* studies. This is the second section of the secondary course of six years and is under the college faculty, the first section being in the lower school. The second division, or College, is made up entirely of elective courses.

REQUIREMENTS FOR ADMISSION.

For admission to the College course, a student must be *16 years old, of good moral character and must pass a satisfactory examination in all subjects embraced in the first five years of the secondary course. In the regular course the final examination would come a year later, but in order to conform to the requirements of the Board of Regents of the University of the State of New York the formal college entrance examinations are held at the end of the fifth year of the secondary course at the minimum age of 15* years. At this point the student has had the full equivalent of what is demanded in the American four years High School or



A Group of Pupils in "Internato."

Preparatory course (much more in Latin, Portuguese and two modern languages). The "maturity" examination is, however, not held until the secondary course is completed, which embraces the work of the Freshman year of American colleges.

DEPARTMENTS OF INSTRUCTION.

MATHEMATICS.

All of algebra; geometry, analytic and descriptive; trigonometry; calculus, land surveying, mechanical drawing.

Professors Waddell, Barreto and Instructor Armstrong.

MECHANICS AND PHYSICS.

These branches receive the same attention as is given in American colleges. Professors Shaw and Frick and Instructor Waller.

PORTUGUESE.

This is the language of the country and is given the place recently accorded to English in the United States. It takes up the study of later Latin, out of regular course, with that of

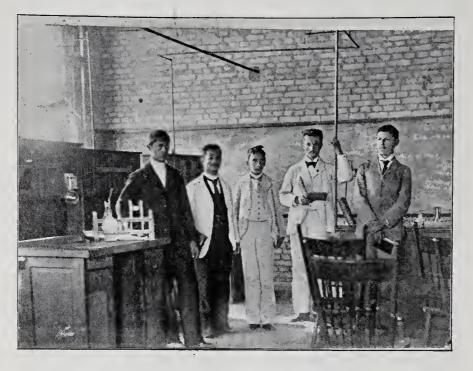
*Equivalent in physical and mental development to 17 or 18 years in our country.

early Portuguese, which is a kind of Latin. It continues through the entire school and college course. Comparative grammar and literature very thorough. Professors Sanctos Saraiva and Carvalhosa.

MODERN LANGUAGES.

This branch receives much more attention than is given in any American institution. The study of English and French commences and is practically finished, as to the grammar and ability to translate at sight and write fairly well, in the preparatory school. At the end of the fourth year of secondary course the students receive instruction and use text-books in French and English. The course of English literature and reading is the same as demanded in American colleges; that of French is equivalent to that demanded by the French Lyce?. German is elective and is little studied.

Professors Caperan, Lyon, Armstrong and Aldridge.



In the Laboratory. CHEMISTRY.

This takes three semesters; all of second and half of third year in laboratory. Professors Shaw and Barreto.

BIOLOGY.

Two years required, may extend through the entire course. Field work in botany: laboratory work and comparative studies. Professors Lane, Loefgren and Shaw.

GEOLOGY-PALAEONTOLOGY.

Through the fifth year. Chair vacant. Occasional lectures by outside professionals.

HISTORY AND SOCIOLOGY.

General history required three semesters. French and English history are a part of the respective courses.

Professors Waddell and Sanctos Saraiva.

MENTAL AND MORAL PHILOSOPHY.

Begins at the fourth year and receives the attention given in Union College. Professors Waddell and Carvalhosa.

RHETORIC AND LOGIC.

Two courses, one in English for students preparing for the study of theology, under Professor Waddell; and another in the regular course, under Professor Sanctos Saraiva, and include criticisms and construction.

LATIN.

This branch is taught in the preparatory course, in the grammar school, as a basis of the study of early Portuguese. In the College and University course it receives the development only possible in a Latin country. The professor in charge of this branch is the author of a Latino-Portuguese dictionary, an advanced Latin grammar, and is a noted scholar.

GREEK.

Greek is not commenced until the last year (the 3rd) of the Gymnasium, or disciplinary, course. Chassang's Grammar, in French, three books of the Anabasis and one book of the Iliad are read. In the Literary or Classical course the study may be continued as in corresponding department of American Colleges. There is a special course for students preparing for the study of theology embracing New Testament Greek.

for the study of theology embracing New Testament Greek. It is dropped in the scientific and engineering courses at end of third year or omitted altogether in Civil Engineering course.

Professors Caperan and Lyon.



Back view of buildings from the Campus.

BIBLE STUDY.

New and Old Testament study is given a very prominent place throughout the course, Old Testament characters, divided monarchies and location of Prophets; Life of Christ. Evidences of Christianity. New Testament studies, etc. The Bible is used as a text-book throughout.

Prof. Rev. Carvalhosa.

LAND SURVEYING.

There is a special course in what is known in Portuguese as "Geographical Engineering"—Land Surveying. In second year much field work is done with level and transit. Line Surveying. Determination of Areas. Farm Surveying. Use of Chain. Adjustment of -Instruments. Field Practice in Elementary Triangulation. Survey of Plantations. Contouring and Topographical Surveys, etc., etc.

Profs. Waddell and Frick.

At end of second year a certificate of Land Surveyor is given to students who have done all the work of the course in a satisfactory manner.

THE SCIENCES.

Are taught in laboratory and field as practically as possible. There is also a higher *commercial course* under Professor Carvalhosa.

Only three courses are at present attempted—Scientific, Engineering and Literary. The Engineering course may be completed at end of third year by eliminating Greek altogether from the course. The Scientific and Literary courses are completed at end of third year, and students who have done all the work demanded in a satisfactory manner receive the degree of B. S., B. E. or B. L.

For the Bachelor's degree a student must have preserved a good character record, pass a satisfactory examination in every subject designated in his course and present an acceptable thesis for graduation.

For the Master's degree the applicant must give notice to the Faculty, a year in advance, of his intention to try for the degree, present a printed thesis on an original subject, which, if satisfactory, he will be called upon to discuss before the Faculty, publicly. The degrees to be granted by Board of Trustees on recommendation of Faculty.

In the future, examinations will be fiscalized and diplomas issued by the Board of Regents.

EXAMINATIONS.

These are held frequently, informally, and are rather of the nature of reviews than a test of knowledge. They are held for the benefit of the pupil or student and are both written and oral. The monthly examination in the secondary course and the quarterly in the college are arranged by the faculty and not by the teachers.

We believe there has been more miscarriage of good intentions, more downright injustice and more unnecessary suffering resulting from the old "finuls," on which the fate of the student was made to depend, than from any other of the old erroneous processes.

the student was made to depend, than from any other of the old erroneous processes. The student is ranked on the work done throughout the year. The "points" honestly earned are not to be lost through nervousness, worry or home trouble, in a fatal "final."



In the Manual Training Shop.

There is a final examination for the "maturity" certificate and for college graduation, in which opportunity is given to improve, but no failure is permitted to destroy the standing already honestly earned and credited.

A pupil of the secondary school or a student may *pass* on his record, without the *final*; or may recover lost ground in the final, which, in such cases, is prolonged and thorough. A high annual average is demanded in all departments to enable the pupil or student to pass from one grade to another. They must know well the subjects taught, and be able to do the next thing.

GENERAL PLAN OF INSTRUCTION.

In the general scope of work an attempt is made to follow the plan adopted in Union College, modified, however, to suit a Latin people and language.

Disciplinary work through study of languages is much more satisfactory among Latin peoples than that obtained through the study of mathematics; modern languages, therefore, dip int) the courses of the lower school, in fact, begin with the first primary class and continue all the way through. They awaken early the habit of comparison and make it easy to study well. College work commences a year or two sooner than in American colleges, as the first year of the American college is included in the secondary course. The disciplinary work is completed at a point corresponding to beginning of Sophomore year in the American system.

At this point the student drops the general course and selects one which has direct reference to his life work, whether it be law, medicine or some other department of activity. The result is that he may enter the professional courses two years in advance, and may finish the engineering course and receive his C. E., with an additional year.

We offer at present three courses.

GENERAL PLAN.

The periods of recitation are of fifty minutes. In field and laboratory they are much longer A certain amount is demanded and student must take as much time as is needed to accomplish it. No equivalent is accepted for either field or laboratory work and no student is permitted to go on without completing this part of his work.

LITERARY, 3 YEAR	s.	SCIENTIFIC, 3	YEARS.	Engineering, 3	Years
Mathematics	16%	Mathematics	24%	Mathematics	18 ² /3%
Latin	16%	Science	18%	Analytics	14%
Greek	16%	Greek	16%	Applied M.	15 1/3
Science	12%	Philosophy	4%	Science	22 ¹ / ₃ %
Philosophy	8%	Sociology	4%	Philosophy	2%
Sociology	4%	Bible	91/3%	Bible	91/3%
Bible	91/3%	History	5 1/3%	Portuguese	5 1/3%
History	51/3%	Portuguese	5 1/3%	English	5 1/3%
Portuguese	51/3%	English	4%	French	5 1/3%
Electives	8%	French	4%	Electives	1/3%
		Electives	6%		
ø	100				100

100

Minimum recitations seventeen hours a week. No lectures before the beginning of the third year.

About 60% of the work is done in Portuguese. About 20% of the work is done in English. About 20% of the work is done in French.

PUBLICATIONS OF SCHOOL AND COLLEGE. (IN PORTUGUESE.)

A history of Brazil, 2nd Edition.

An Elementary Geography, 12th Edition.

A Complete Atlas and Geography,—nearly ready for the press.

A Portuguese Grammar, 4th Edition.

A Text-book on language, for primary teaching, 2nd Edition.

An English Method for Portuguese learners, 3rd Edition.

A series of 7 Arithmetic Tablets. 2d Edition.

Portuguese Reading Books, a series of 4 books.

American Copy-books, -A series of 7 grades.

A set of 24 Reading Tablets.

SYLLABI:

Complete course of Portuguese grammar and literature. Study of Arithmetic, by grades. Sacred History, 40 lessons. Ancient Geography, 6 lectures. Outlines of General History,—a three-years' course. Latin, notes on a three years' course. Religious Instruction,—general principles and outline. Experiments in Chemistry. Outlines of Physiology and Anatomy,—comparative studies. Method of study of Geography, outlines of course.

Principles and methods of study of Mathematics, from primary lessons in numbers to finish of College course for teachers.

The study of modern languages in grammar school,—its value as mental discipline,—outline of course. Observations of results for teachers.



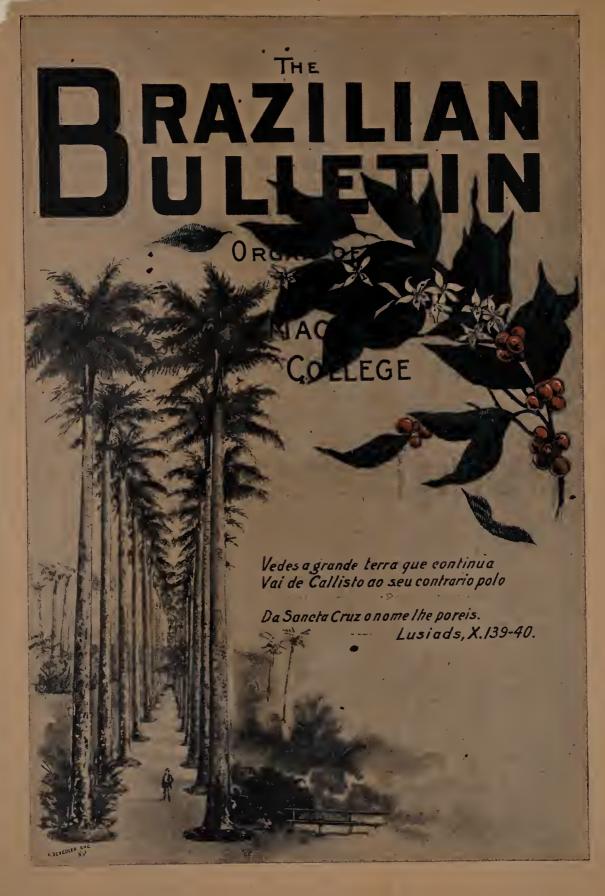


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THE Brazilian Balletin, Organ of Mackenzie College. NUMBER 3.

BERNADINO DE CAMPOS.

We offer to our readers the portrait of a Brazilian Statesman to whom the New Republic owes much; a man who possesses a rare combination of intelligence, integrity, clear conviction of duty and the courage to live up to it, and an unselfish devotion to his country's best interests.



Dr. Bernadinò de Campos was born in a small town of Southern Minas in 1841, but at a tender age his parents moved to the State of S. Paulo, where he grew up, received his education, and with which he has become thoroughly identified. He was graduated from the Law School of S. Paulo in 1863 and commenced the practice of law in a neighboring city. Very early in life he became interested in politics and joined the group of Liberals who organized the first Republican party, and in 1888 he represented the party in the provincial assembly.

On the advent of the Republic he came naturally to the front, as did all the prominent men of the party, and he has been ever since one of the trusted number of genuine Republicans, upon whom the burden of the work and responsibility for organizing the government and consolidating free institutions, has fallen.

During the provisional Government, the first year of the Republic, he was chief of police of the State of São Paulo under Prudenté de Moraes, the first governor.

It was a period of agitation and danger, but Dr. Bernadinò was able to protect society and keep from S. Paulo the turbulent scenes which occurred in many other states.

He was sent to the first Republican Congress, and, by an almost unanimous vote, elected Speaker of the House. During the trying period through which the House passed he presided over its deliberations with tact, wisdom and firmness, showing executive ability of a high order. In 1892 he was elected Governor of the State of S. Paulo, without opposition. It was in this position that his great administrative a sility was shown.

With the efficient aid of his talented friend Dr. Cesario Motta, Jr., who resigned a seat in Congress to accopt the subordinate position of State-Secretary of the Interior, Dr. Bernadinò re-organized public instruction, put the normal and model schools upon a sound basis, and gave to popular education an impulse that is still felt in every state of the Union. The health of the state was looked after and a system of city sanitation was established. Drainage, water supply, rapid transit, encouragement of agriculture and industry, and the honest administration of public trusts were the notable features of his administration, when the state began its phenomenal advance.

He was succeeded by Dr. Campos Salles, now President of the Republic, and took a short respite; very soon, however, the President, his f iend and colleague Dr. Prudenté de Moraes, called him to the difficult position of Secretary of the Treasury, at a time when a crash seemed inevitable and the oldest economists could see no way out of the tangle into which the finances of the country had fallen. With no special training or experience in national finances, Dr. Bernadino responded promptly to the call, regardless of the personal sacrifice it entailed and the damage to a well deserved reputation which it involved. He addressed himself immediately to the task of reducing expenses, increasing the revenues and fiscalizing their collection.

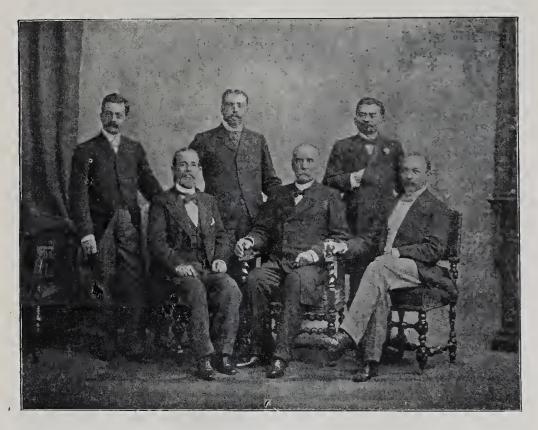
One day the business men of the capital,—merchants, bankers and journalists,—awoke to the fact that the quiet, modest, brainy man, at the head of the country's finances, had a firm grip on the situation and was finding a way out. A great public banquet was the result of the discovery.

It is detracting nothing from the recognized merits of Dr. Prudenté de Moraes, or from the wisdom of Dr. Campos Salles, to say that the *Moratorium* and its attendant measures, the restoration of public confidence, the opening of the way for the rehabilitation of the country's finances, is largely due to this modest man of rare perspicuity and still rarer patriotism, who was Secretary of the Treasury during the last two years of Prudenté de Moraes' administration.

In personal appearance Dr. Bernadinò is tall, well formed and erect. with a firm step and a grave, but frank and kind physiognomy; rather contemplative in demeanor, but affable and courteous. Modest and unassuming, but frank in personal intercourse, speaking in a low pleasant voice; a faithful husband, an affectionate father, a loyal friend and an honest man.

In public life he is a man of action and conviction, tolerant and reasonable in discussion with opponents, but plain and outspoken in his belief that the Republic is safest in the hands of its friends, men who made sacrifices for it in its dark days, rather than in those of fair-weather opportunists who were converted at the eleventh hour. He makes no compromise in measures involving principle, but is easy and conciliating when it is a mere matter of method. As a public speaker he is slow and quiet, but a clear reasoner, and very effectual, convincing rather by reason of *what* he says than *how* he says it.

He married an estimable lady in 1865 and has a large family of boys and girls, most of whom have been educated in the American School at S. Paulo.



PRESIDENT CAMPOS SALLES' CABINET.

I. DR. EPITACIO PESSOA. 3. DR. DOMINGOS OLYNTHO. 5. DR. SEVERIANO VIEIRA. 2. ADMIRAL BALTHAZAR. 4. GENERAL MALLET. 6. DR. MURTINHO.

One of his sons was recently State Secretary of Justice, under Dr. Campos Salles. His brother, Americo de Campos, is a well known journalist. His domestic life is a very happy one. It is a singular fact that the wives of the Paulistas who have been most prominent under the Republic during the critical period of its organization and consolidation, should have all been types of strong, pure and well-equipped women, who have been pillars of strength to their husbands. D. Francesca de Campos is an example of them and has contributed not only to the highest type of domestic harmony in the education of children and direction of a home, but largely, also, to the success of a hu-band in critical moments. It is impossible to consider the organization of the Brazilian Republic, the consolidation of its laws, the re-organization of its finances, or the administration of its affairs since its birth, without giving a most important place to this member of the "Old Guard" who has held one important post after another, always with honor to himself and his country.

Still in the prime of life, with excellent health, which has never been undermined by bad habits, a man of the people and for the people, for whom wealth has no allurements, personal greatness no danger; of unimpeachable integrity, unbounded patriotism and tried ability, we shall expect to hear more from Dr. Bernadinò de Campos. As President of the Republic he would be a success.

Brazil may expect much of his devotion to country and his exceptional ability.

With men of his type and such women as D. Francesca de Campos, D. Anna Saeles and the wife of Dr. Prudentée de Moraes, Brazil may look to the future without fear or misgiving.

On another page we print a synopsis of his last report to which we call special attention.

TWO AMERICAN WOMEN IN BRAZIL.

We present to our readers the portraits of two American women whose names, we venture to say, are familiar to all interested in mission work in Brazil, and the influence of whose work has been felt in more Brazilian families than that of any other foreigners in Southern Brazil.—Miss Mary P. Dascomb, who returns this month to Corityba after a year's furlough and enters upon her fourth decade of service in the cause of Christian Education;—and Miss Elmira Kuhl, who returned to the same field a year ago and whose term of service extends through twenty-five years.

These pioneer educators of the Presbyterian Mission in Brazil deserve a larger notice than our space affords. The history of Protestant Education in Brazil cannot be written without weaving their names into its every page.

It is always a difficult and delicate task to write of living workers; it is doubly so to write about one's associates in work. Yet something may be said, we are sure, to give our readers some adequate idea of the faithful and efficient teachers who, at a time of life when most people think of retiring from active responsibilities, return to their distant fields gladly, joyfully, and with the enthusiasm of early days, in no wise dampened by the *cuts* which so hamper the work; and which would sadden and discourage spirits less brave.

It would be difficult to find two persons who, at first sight, present more points of dissimilarity in temperament and methods of thought and work than these two inseparable companions.

Miss Dascomb, full of dash and energy—a brilliant conversationalist, a *blue*stocking, abreast of current literature and the movements of the great world, of positive views in social, literary, pedagogic, and political matters, representing in social life and in her class-room, as far as a refined and cultivated lady may do so, the *fortiter-in-re*—though extremely sensitive and timid on occasions—a warmhearted, generous, womanly woman withal. Miss Kuhl, placid, quiet, though merry, very patient and reserved in her opinions, though holding to them tenaciously; with infinite tact and gentleness, painstaking and thorough in all her work, methodic and systematic in business, having great administrative ability and a perseverance that knows no defeat; always carrying her point in the long run, a wise woman in her day and generation, representing in the Mission firm of Dascomb & Kuhl, as far as is consistent with sound business principles and effective work, the *Sauviter-in-modo*,—both of them consecrated women seeking to do Christ's Work in Christ's Way, each supplementing the other and forming together an effective, harmonious whole. Rio, Brotas, Rio Claro, S. Paulo, Botucatú and Corityba speak for them, as do scores of Brazilian girls educated and grounded in Christian principles by them, now occupying positions of influence, and holding fast to the faith--powerful factors in the elevation of the sex and in the regeneration of the Nation.

MISS MARY P. DASCOMB.

Mary P. Dascomb was born June 30th, 1842, in Providence, R. I. Her childhood and youth were spent in Oberlin, Ohio, in the heart of the wonderful educational Institution that sends forth yearly scores of earnest men and women to put their shoulders to the great wheel that makes the world go round. To know, to love, to serve God and humanity is instilled by every breath of Oberlin's teaching. Miss Dascomb was graduated at Oberlin College in the Class of 1860, taught one year in Joliet, 111., a year in Elyria, O., another in Canton, O., then a few



months at Vassar where she received an invitation to go out to Rio de Janeiro as teacher in the family of the American Consul, remaining with them two and one-half years. Returning to Rio again, after one year spent at home, as a member of the missionary force. After a few years of work in Brazil, she was called home by the illness of her parents; remained in this country four years, teaching at Wellesley College three and one-half years of that time. After their death, she returned to the work in Brazil.

At Oberlin, missions were early studied and supported. Hundreds of Oberlin's sons and daughters have gone to India, Africa, China, Japan and the Isles of the Sea to spread the

Glad Tidings; so it was most natural that this child of Oberlin should accept an invitation from a missionary to enter the work in Brazil as a teacher. Brazil is not pagan; railroads, steamers and telegraphs keep her in touch with more advanced civilization, but one finds it necessary to supplement books with a vast deal of individual work in lessons. Busy as are our teachers in the rush of life in the United States, there is much more to be planned and executed in the Land of the Southern Cross. There is no possibility of tedium, of homesickness with such a magnificent field for effort. Thus the years pass on and the end is not yet.

MISS ELMIRA KUHL.

From a Sketch Published in the Orthographic Journal at Ringoes, N. J., June, 1898.

Miss Kuhl was born at Copper Hill, near Flemington, the county seat of Hunterdon County, N. J., February 13, 1842. She attended the district school

of her native town, and at the age of 16 entered the Presbyterian Institute at Peekskill, N. Y., where she remained only one year, at the end of which she entered the Woman's College at Bordentown, N. J., taking the full course and graduating in one term, receiving her diploma. She attended school at Ringoes for a year. In 1865 the County Superintendent of Schools licensed her to teach the public school at Copper-Hill, where her work gave great satisfaction to all, showing her to be an excellent teacher and a good disciplinarian. In the autumn of 1870 she opened a select school in her fathers' house, which soon became popular and was well patronized. This school continued in operation till she left North America to enter the Mission field. For some time after her graduation from College, she acted as her father's assistant in his business and there obtained that practical knowledge of affairs which has made her school administrations so successful.

She was appointed by the Presbyterian Board of Foreign Missions to the Brazil



Mission, May 7, 1874. A month later she reached Rio Claro, an interior town of S. Paulo, and joined Miss Dascomb in the school work there. In 1877 she removed to S. Paulo where she remained for twelve years.

Then a great work was done. For a time Miss Dascomb was separated from her, being in charge of the School at Botucatú. In 1892, the S. Paulo school having become self-supporting, she and Miss Dascomb responded to a call to go to Corityba, the capital of the State of Paraná. immediately south of S. Paulo. Here she and her faithful co-adjutor are repeating the noble work done in S. Paulo. Her activities are not all applied to school work. She is also a power in the Church, in the Sunday School, Women's Auxiliary Societies and other evangelistic work. We Americans attach little importance to our ancestral honors, still it is well to know they are such as not to make us ashamed. Miss

Kuhl is a worthy scion of an honorable race. The Kuhls came, in remote times, from Spain, whence they fled to France for their faith. Later, for the same reason, they took refuge in Holland where they lived for less than a century before coming to New York, then New Amsterdam. This branch of the family lived in Bridge Street, when there were only three houses in it. They were traders with the West Indies and the water-way between Staten Island and New York, "Kill-von-Kuhl," was named for this Kuhl. The saying is still current when the waters of the "Kill " are wild—"Old Kuhl has his Spanish up."

They were a brave, fearless people and when trouble arose with the English, "Old Kuhl" shook the dust of New York off his feet and moved to the interior of New Jersey, to the spot where the family has ever since resided.

On the mother's side Miss Kuhl belongs to the Yutphens or Sutphens, an ancestry, if anything, more ancient and quite as illustrious, also coming from Holland, though originally from Spain, as did many of the families of the Dutch nobility. The Sutphens number Dukes and Barons among their ancestors.

To such ancestors we may trace the courage, devotion and steadfastness of purpose that has characterized Miss Kuhl's successful missionary career, to which we trust many years of work yet belong.

THE CHERENTE INDIANS, OF THE TOCANTINS.

II.

Several thousand of this tribe of Indians, who were *tamed* by the Capuchin friar, Rafael de Taggia, in 1851, are to-day settled on the banks of the river Tocantins, in the state of Goyaz.

They live in a state of primitive ignorance, still preserving the tribal government of their ancestors, and are peaceable and well-disposed; as for their religious status, it may be said that their taming and catechising have simply added to the pagan superstitions of their race some of the superstitions of Romanism and a few external ceremonies, without giving them the least idea of the spiritual significance of Christianity.

Their present head chief was baptized by Father Rafael as Joaquim Sepé, in 1848; in 1896, with a small band of his people, he made the long journey overland, on foot, to Rio de Janeiro, seeking at the hands of the great white chief, the President, assistance and protection from the whites who had begun to invade his lands and disturb his people, and help in the shape of agricultural implements, and a teacher for his people. He obtained nothing from the government, but from private sources in S. Paulo, he received liberal assistance, and returned well equipped with necessary supplies, and a woman teacher.

Captain Joaquim Sepé, or as he is called at home, Chief, has brought together some of the scattered members of his own and kindred tribes, and settled about 4,000 adult men with their families in 14 villages. We must here note, that when an Indian reckons beyond 20 or 30, his numbers are not very reliable, but these figures are confirmed by reports of various travelers who have been among the people of this tribe. Only adult men are considered in taking a census among the Cherentes.

Father Rafael, in his report published in Vol. XIX. of the Hist. Association of Rio, gave the number in Piabanha as 2,139. In 1877, Alfred Marc found there 2,723 tame Indians, about half of whom could speak Portuguese. The Carajôs, friends and kinsfolk of the Cherentes, live further north, at Pedro Affonso, on the Somno river. The chief of this tribe was in S. Paulo in 1889 and reported that the Cherentes then had 9 villages. It is the intention of Chief Sepé to bring together *all* the scattered remnants of the friends and kinsfolk of the same great race, the Cherentes, into what he terms "one brotherhood." This will include the Chavantes, the Apanagés, the Canellas, the Caiapôs, the Pivôcas, the Carajós, and many others. He has already brought in many of the wild Caiapós from the Serra dos Gradaús, in the N. Araguaya region, and is planning to bring in soon the Chavantes and the Carajôs. It would seem from this that Sepé is no ordinary savage, but a man with vast and beneficent plans for the unification and uplifting of his people.

Close association with Chief Sepé and long and frequent conversations with him have convinced us of his intelligence, of his remarkable clearness of vision, and of his honesty of purpose. The following notes of these conversations, or rather answers to definite questions, were taken, carefully corrected and compared while the Chief was with us.

The study of Brazilian Indians, their legends, customs, languages, origin and even tribal distinctions, names, etc., is a vast babel,—a mass of confused statements; some based upon facts carefully observed and others upon the exaggerated stories of hunters and traders told to credulous travelers. The capital of the Cherente settlement is Piabanha, on the right bank of the Tocantins, though the Chief's residence is on the other side some two miles away. The former residence, Theresa Christina, located some distance below, was abandoned because of continued sickness. Of the 14 villages mentioned, 9 are on the left, and 5 on the right bank of the river. In the time of Friar Rafael there were only three villages:—the Panella de Ferro, S. João and Theresa Christina.

As soon as Chief Sepé took charge of the tribe, he divided it into smaller settlements, each with a sub-chief, in order to promote industry and avoid discord. He is the general superintendent and to him all questions are referred; he consults with the "old men" and gives his decision from which there is no appeal.

The villages are as follows:-I. On the right bank between Piabanha and the river Somno, are:

1.—Lageado (in Cherente-Zucá) 4 leagues,¹ from Piabanha, with only 30 men, under sub-chief Chico.

Zucá, or Zu-Keu, means the river of the Trahira, a species of fresh water shark, noted for its voracity and savageness; the Indians fear it and hunt it with harpoons.

2.—Boqueirão (S'crié) 5 leagues from the capital, having between 30 and 40 Indians under Manuelzinho.

S'crié, pronounced as if it had a mute e after the S, means a gorge.

3 — Páo-Brazil (Logwood)—(*Bur'-tu'-udelui*) 8 or 9 leagues away with 1,100 to 1,140 men, under sub-chief José da Motta.

Bur'-tu'-udelu means a log-wood forest. Bur'tu or Burutu---the second u is pronounced rapidly,—is log-wood, while udelu is a forest, grove or clump of trees.

4.—Morro do Chapeu (*Kten-coá-cá-rié*), 12 leagues away, with 100 to 110 men, also under José da Motta.

Kten-coá-cá-rié,—a small whitish wall of stone, found here. *Kten*—stone; *coá*—wall, face, surface; *cá*—white; *rié*—a diminutive, small.

5.—Rio do Somno—river of sleep (*Kten-cá-keu*) 15 leagues farther on with 100 to 140 men, under the same sub-chief as the last two.

Kten-cá-keu means the river of the white rocks.

II. On the left bank of the river from Pontal to opposite Pedro Affonso are:

1.—Providencia (*Noronró-zaurć-keu*). This is the headquarters of the tribe and the residence of Chief Sepé. It is the active center of work and the court of appeals, where all contention is finally settled. There are about 800 men here, who are the chief men of the nation.

Noronró-zauré-keu, the river of great palms. Noronró, pronounced with a strong nasal on and a soft r—is a palm-tree; zauré, means great; keu means river.

2.—Gorgulho (*Kten-rêkin-zauré*) and *Surucuriú* or *Sucury* (Keu-cá-rié). Two small villages about 3 leagues from Piabanha, with 150 to 160 Indians under subchief José.

Kten-rêkin-zauré means a heap of gravel and shells. *Kten-rêkin* means a large place covered with pebbles or gravel; *rêkin* means dry; *zauré* means great. *Keu-cá-rié*, a small white or clear stream.

3.—Pedra-Hume (alum) (*Kten-ksú-rié*), 12 leagues further up-stream, on the river Bois; 100 to 150 Indians under Theodoro; here, in a species of grotto or cave, alum is found in abundance.

Kten-ksú-rié, a stone house or cabin isolated in the center of the village.

4.—Prata (*Oacutómôn-udehú*), near a beautiful stream, 14 leagues from Piabanha. 130 men under chief Amaro.

¹A Brazilian league is 6 kilometers.

Oacutómôn-udehú, a forest or grove of landi, a kind of wood called by the Cherentes, oacutó.

5.—Tobacão (*Curubé-crieu-keu*), 18 leagues away—a dark somber place on the river, noted for its cañons or high walls and caves; called by some, the river of *Inferno* (Hell). Here there are only 60 men under Capt. Luiz.

Curubé-crieu-keu, river of the hollow walls. Curubé, high wall; crieu, hollow.

6.—Ponte Alta (*Cúinto-pré*), 20 leagues; from 200 to 210 men under chief José Ladino.

Cúinto-pré, spring of red water. Cúinto, or keu-into: keu, water; into, spring or eye; pré, or topré (to is left out for euphony), means red or rusty.

7.—Bananal (*Uê-supô-hû*) about 30 leagues above Piabanha, has about 1,000 to 1,150 men under chief Raymundo.

Uê-supô-hú, —a thicket or cluster of wild bananas. Uê-supô-wild banana plant;
 hú, or nachú (abbreviated for euphony) is a ticket, or a clump of trees.

8.--Recongo (*Bru* sazi) very near the last and under the same chief, with 150 men.

Bru-sazi—a planted field or small farm where birds' nests are found. Bru—a cultivated field; sazi—a nest; si—a bird.

9.—Bananal 2nd (*Odĉititê-keu*), 7 leagues above Recongo, with 150 men under Lucio, a cousin of Sepé.

Odêtitê keu—a river where wood is found that dulls the axe. Odêtitê, or odeatide—a very hard wood that turns the edge of the axe.

Villages 5, 6, 7 and 9 were formerly part of the old "Panella de Ferro," already mentioned.

The chief finds that he has gone to the other extreme and located his people too far apart; he, therefore, intends to bring them closer together, and contemplates moving his residence to a high and beautiful point on the river where he will build a school house, thereby rendering it more accessible than it would be at Providencia, where he now lives.

The Cherentes belong to the *Ges* or *Crans*, of Martius' classification. They are the "great people," distinguished from the *Tupys*,—the "warrior people," and from the *Crens* and *Guerengs*, or "ancient people."

The name has its origin in a custom of the tribe. At a very early age, a small circle is shaven on the head of the child, using the sharp edge of a *bambú* for a razor; this crown is somewhat similar to that on the head of a Roman Catholic priest, only it is painted red with the juice of the *urucú*. The shaving is now done with a knife. This crown is called $d\acute{a}$ -nhen-ren (the h in nhen is aspirated and given a guttural sound). The one thus crowned is called *in-seren*, or *seren*, hence the name Cherente, or shaven-crowned.

When one Cherente asks another if he has his head shaven, he says, "seren-di?"

D'Orbigny (Voyage pintoresque dans les deux Ameriques, page 161) says that the Cherentes, at the beginning of this century, were a great and powerful people and were considered anthropophageous, because they killed and ate their old and sick relatives. Chief Sepé says that the "old men" of the tribe have kept the traditions from a very remote period, when the Cherentes were a roving race of warriors, and that it is true that formerly the old people were eaten, when they did not die of some repugnant disease, or one that reduced them too much. By so doing, they felt consoled by being identified with their loved ones, not for the sake of the food thus obtained, but as a rite or ceremony showing their esteem. The custom has been abandoned for many years.

Acuen, a name used by some travelers to indicate the *Chavantes*, kinfolk of the Cherentes, is a generic word meaning a human being, people, gente, and should not be used as a tribal name. The Chavantes and Cherentes speak of each other as achen-odsi-cúi-od, people kin to us. The Caraós, Cayapós, and Carajás were

formerly all Cherentes; to-day the Carajás are their worst enemies. The "old men" say that on the Tocantins, between Imbira and Itaboca, there is another tribe speaking the Cherente language, the Gaviões, but that they are a savage and dangerous people.

The Cherentes have some very curious customs as to the training of boys and marriage.

During the early days of childhood the children remain with the mother; the girls remain till they are married, but, as soon as the boys get large and strong, they are taken from the mother and put in a house by themselves, into which no female may enter.

Each family builds such a house in front of the main dwelling; it is conical in shape with bunks disposed around it to correspond to the number of boys in the family; here the boys are obliged to sleep alone until thoroughly weaned from their parents; when they approach the age of puberty, they enter the community



Toba Indian Girl.

house for training boys, the *ou-ran*, situated in the center of the village, but isolated from all the other houses.

The girls and unmarried women live free in the village in the homes of their parents, relatives or married friends. As long as they continue virtuous, they wear anklets and bracelets as signs of virginity. They are then called *si-psá* (virgin), this term may be applied to both sexes; if they are perverted or goastray, the badges are removed from ankle and wrist, and they become *deu-bá*, impure, lost, without shame.

The boys, who have been kept free from contact with women from before the age of puberty, are kept severely guarded in the *ou-ran*, which is something like a monastery, and trained in the various exercises and manual arts in which the Cherentes excel. There, the older *celebats*, some of whom reach the age of 40 before marrying, teach the

youngsters to make bows, arrows, hammocks and implements of hunting or farm labor; they take them to the fields and watch over them while they work, armed with clubs to keep away the women, and to keep the boys in order; they also teach them the traditions of the tribe and instruct them in all things considered useful.

If one of them should rebel or show immoral traits, or escape at night and mix with the women, or in any way stray from the Indian standard of virtue, he is expelled and returned to his parents, where he is stripped of the badge of purity and becomes a *ai*-meú-man, shameless.

The veterans of the *ou-ran* are highly esteemed in the tribe and by out-side Indians. They are first in war; the strongest, the bravest and wisest. They only marry when forced to by the tribe or their family.

Formerly, polygamy was practised among the Cherentes; this was abolished by Sepé, who set the example by restricting himself to one wife. Marriage (*cri-ten-cod*) is a peculiar institution among the Cherentes and unlike that of other tribes, differing even from that of the Chavantes with whom they lived many years, and from whom they separated on account of questions about the women.

Growing out of the system of education just mentioned, there are two kinds of marriage;—one is the forced marriage of the *si-psá* of both sexes who are obliged by parents to marry. This is a religious rite and subject to many ceremonies. The other is the voluntary union of the impure,—*ai-meú-man* with the *deu-bá*. This is a civil ceremony to legitimize the union of those who have strayed.

Some of the *si-psá* never marry. This is rare now-a-days, but formerly, they sometimes remained in the *ou-ran* until ripe old age, and became like regular monks. In the *ou-ran* there is a regular order of advancement, a genuine hierarchy, like that of the religious orders of the Roman Catholic Church, from laybrother to prelate or dean. This interesting custom long antedates the advent of the white man, else we should be inclined to suspect that it originated with the Capuchins who catechised them; but Sepé affirms that it goes back to the remotest history of the tribe, and that the old men complain, that since the coming of the priests, it has lost much of its rigor.

The male child, while entirely under the mother, is called $ai - ka\hat{e}$; as soon as he sleeps in the k'sú, separated nights from his parents, he becomes a bré min; when he enters the ou-ran he is an ach-ton, or school boy. The moment he has learned something and shows some interest in his work and develops good sense, he becomes a $c\hat{u}$ -bôronpó-coá.

From this time he is simply a *si-psá*, and is no longer master of his own person or actions, but is completely under the surveillance of the older *si-psá*, though he may have authority over some of the *ach-ton*. The next step is to become a *paise-c'-ratú-coá*, a mature *si-psá*. After this, he becomes a *pai-se-cá-coá*, a veteran, *i. e*, a *si-psá-ptó-creu-dá*, a full grown and mature man who has passed all the tests and may be forced to marry. If he escapes this and remains in the *ou ran* until 60 years of age, he reaches the supreme degree of *si-nhan-cá-zú-riê*, which, Sepé says, is extremely rare now. He considers the nation less virtuous than in old times, and says that the *ou-ran* has fewer and fewer boys every year.

Questioned about the purity of life in the *ou-ran*, Chief Sepé stated that no one could remain whose conduct was not irreprehensible, even laughter is forbidden; the veterans are of severe and grave aspect, and when an *ach-ton* laughs or attempts to frolic, he is warned, and, if he persists, he is expelled. The destinctive sign of the residents of the *ou-ran* is a belt of *embira*, a strong bark used for making rope. The degrees of advancement are shown by signs painted on the body; the *ach-ton* and the *cú-burôn-pó-coá* are distinguished by two black lines over each shoulder and down front and back as far as the knees. When the *ach-ton* becomes a *cú-burôn-pó-coá*, his hair is tied at the back of the neck with strings made of the bark of the *burity*; this is called the *cú-burôn-zé*; thus the *si-psá*, at this period, must wear his belt and his long hair must be tied with *burity*. When he becomes a *pai-sé-c'rutú-coá*, the stripes are increased in number; the *pai-sé-cá-coá* adds a few transverse stripes; the *si-phan-cran-coá* adds rings along the lines; the *senan-crezá* p'dú may paint a series of triangles, while the *si-nhanoá-zú-rié* has two broad stripes composed of fine lines.

Village life and the invasion of the whites are emptying the *ou-rans*; the *ai-meú-man* and *deu-bá* are vastly more numerous than the *si-psá*, and the religious marriage, the *cri-ten-coá*, is becoming less frequent. *Cri* means house; *cri-ten-coá* is, therefore, a wedding from the house. The civil ceremons is dá-cú-ken. Divorce or separation followed by second marriage is very uncommon, but when it occurs, the religious rite cannot be repeated. The second union must be a civil one; this is a very simple matter and consists of an agreement between the parents. The name dá-cú-ken comes from the cake of manioc served on the occasion.

There is one institution of an elevated character among the Cherentes that denotes great wisdom—that by which they have avoided incestuous unions. From earliest times, the nation has been divided, like the Hebrews, into two tribes or families; one, the *si-dá-cran*, has cut on the face a figure like the eye of the hook-and-eye; the other, *si-p'tá-tó*, has a complete circle cut on the face. Between the members of each tribe there can be no marriage; this prevents the union of near relatives. Chief Sepé belongs to the *si-dá-cran* and is married to a *si-p'tá-tó*. These marks are made on the occasion of a special festival, by an official marker, the *co-mon-siri-man*; each family or tribe takes its marker from the other tribe, and the office becomes hereditary. This functionary has also certain spiritual offices and is greatly esteemed by all; in his house are kept the instruments for the different festivals, and the arms for war. When quarrels occur in the tribe, the marker who officiates in that tribe, steps in and settles; them, and it is only in the heat of a struggle that harm could come to the peacemaker. As a rule the combatants lay down their arms the moment he appears, and stop the fight.

The old men of the tribe say that the Cherentes originated from two brothers. One day the older of them said to the younger that they must make a rule by which a race of strong people might be produced, for they would certainly degenerate if incestuous unions were permitted. They agreed, therefore, that the descendants of the older, the *si-dá-cran* should only marry those of the younger, the *si-p'tá-tó*, and vice-versa. In the first generation, there were unions of cousins, but the two families became more and more separated, each generation, until they were looked upon as different tribes.

Chief Sepé described in detail the religious marriage, of which he had a high opinion, regretting its decadence among his people. We give only a resumé.

The religious ceremony is only permitted between the *si-psá* and between members of different tribes; *i. e.* a *si-dá-cran* with a *si-p'tá-tó*; the children follow always the tribe of the father. The male *si-psá* can only marry when they have reached the second degree in the *ou-ran*, the *si-nhan-cran-coá*. The religious ceremony is a very solemn one. Generally the father of the maiden enters into an arrangement with that of the *si-psá-p'tó-creu-dá*. When the preliminaries are settled, a group of "best men" are selected from among those who have been married by the religious rite; the day is set and these "best men" make arrangements to abduct the groom from the *ou-ran*. All this is done with the greatest secrecy, because if an *ach-ton* gets wind of it and tells the folks of the *ou-ran*, the groom runs away to the forest and escapes. At day break, the "best men" enter the *ou-ran* and take the bride-groom away into the forest; there they adorn him with feathers and paint him in gay colors.

In the meantime, the women of the village are adorning the bride, who is placed in a house, *cri-rie*, built for the occasion in front of her father's house. The bride seats herself between the two doors and waits. The "best men" now bring the groom, who has to be pushed along as he is bashful and afraid. He comes, holding with both hands a bow and arrows crossed over his head. On reaching the door, the bow and arrows are taken from him; he enters and kneels on the right knee by the side of the bride. He immediately gets up, goes out of the door, when his *si-psá* belt is taken from him.

The "best men" now take him again to the forest and give him wise counsel; the same is done for the bride by the women of the village. They are told of the respect due to the husband, *am-bá*, and the good qualities and defects of the wife, *pi-con*; that the wife must serve the husband faithfully, not annoy him or make him impatient. When these counsels have been given and night comes, the groom is taken to the nuptial bed, made of rich mats and colored cloths. There he and the bride are left together not more than an hour. At the door he is again met by the "best men" and taken to the forest where he passes the night The next day is spent in hunting. Of the product of the hunt the groom takes a basket full and leaves it at the door of the bride, returning to his "best men," who repeat the sermon on conjugal duties and privileges; he is again allowed to pass an hour with his bride; he returns to the forest for the night and goes to the hunt the next day. This is repeated for 15 days, and sometimes a whole month, until the bashful groom becomes accustomed to his bride. During all this time he may not eat meat or sleep in his parents' house. The conjugal novitiate ends with a present of a basket of game from the groom to the bride's parents; then follows the festival of the *burity*, when the trunk of a *burity* is carried alternately by the bride and groom.

The paradise of the Cherentes and kindred tribes is in the center of the earth, where the festival of the *burity* is perpetual, in beautiful fields and along clear streams.

To be continued.

THE REVOLUTION OF TIRA-DENTES.

THE FIRST ATTEMPT OF THE BRAZILIAN COLONY TO SHAKE OFF THE PORTUGUESE VOKE-1789-1792.

A cavalry officer of that Captaincy, inflamed by the example of the United States, thought it easy for his countrymen to throw off the authority of the Mother Country, and establish an independent republic. Overlooking the difference between the Americans and the Brazilians, in all their circumstances, habits, institutions and hereditary feelings, he used to say, that foreign nations marveled at the patience of Brazil, in not doing as British America had done. His name was Joaquim José da Silva Xavier; but he was commonly called "O Tiradentes, the Tooth-Drawer." Nicknames obtain such currency in Brazil and Portugal, that they are found in official documents and in historical writings. His views did not extend beyond the Captaincy of Minas Geraes, either because he thought that territory large enough to constitute a powerful commonwealth, or because it would have been too perilous to have formed a wider conspiracy; and he expected that success there would induce other provinces to hoist the standard of insurrection, and that then a federative union might be established. Even in his own country his reliance was not upon public opinion, which had never been disturbed, but upon a peculiar state of affairs, not more perilous to the stability of the Government than it was discreditable to its prudence.

The fifths in that Captaincy, which for many years after the Capitation was commuted, had averaged more than one hundred arrobas, had for about thirty years been gradually declining, till they fell short of fifty. The people were pledged by their own offer to make up the amount of one hundred, whenever the fifths might produce less. Had this been regularly exacted, the tax would have been paid till the difficulty of collecting it, and its disproportion to the diminished produce of the mines would have convinced the Government that it was necessary to abate the impost.

It was collected until the average fell a little below ninety; but from the death of King José, at which time the decay of the mines became more and more rapid every year, the arrears had been allowed to accumulate until in 1790, they amounted to the tremendous sum of seven hundred arrobas, which is equal to the estimated amount of all the unminted gold then circulating in that Captaincy, and is more than half of all that circulated in those interior provinces, where there was no other circulating medium.

It was believed that the Visconde de Barbacena, then Governor of Minas Geraes, was about to enforce payment of the whole arrears. A general alarm in consequence prevailed among the inhabitants. Tiradentes hoped to avail himself of this; and for the purpose of increasing the irritation, he spread a report that the Court was resolved to weaken the people, as one means of retaining them in obedience, and with that view a law was to be passed forbidding any person to keep more than ten slaves. The first person to whom he imparted his designs was a certain José Alves Maciel, a native of Villa Rica, then just returned from traveling in Europe. He had probably been living among the revolutionists in France, at a time when their views appeared to be directed with the most upright and benevolent intentions towards the improvement of mankind, and the general welfare of the human race. They met at the Rio, arranged their plans and proceeding to Villa Rica, engaged in the conspiracy Maciel's brotherin-law, Francisco de Paula Freire de Andrada, a Lieutenant-Colonel, who com-manded the regular troops of the Captaincy. The Colonel hesitated at their first disclosure; but they assured him that there was a strong party of commercial men at the Rio in favor of a revolution, and that they might count upon the assistance of foreign powers.

Colonel Ignacio José de Alvarenga and Lieutenant-Colonel Domingoes de Abrew Vieira were soon enlisted in the plot; the latter was induced to join in the scheme by persuading him that his share in the assessment for arrears would amount to six thousand cruzados. P. José da Silva Oliveira Rolim was one of the associates; P. Carlos Correia de Toledo, Vicar of the Villa de S. José was another. But the person who was represented to all the confederates as the chief and leader was Thomas Antonio Gonzaga, who enjoyed a high reputation for talents; and it was said that he had undertaken to draw up the laws and arrange the constitution of the new Republic.

Their plan of operation was, that when the assessment was made for the collecting of the arrears, the cry of "Liberty Forever!" should be begun at night in the streets of Villa Rica. Colonel Francisco de Paula was then to collect his troops, under pretense of suppressing the rioters, and to dissemble his real intentions until he received intelligence that the Governor had been disposed of.

The Governor was at a place called Caxoeira, and it was not determined what should be done with him; some of the conspirators were of the opinion that it would be sufficient to seize him, carry him out of the limits of the Captaincy, and then dismiss him, telling him to go to Portugal and say that the people of Minas Geraes could govern themselves.

Others were for putting him to death at once, and sending his head to Francisco de Paula as the signal. This was to be determined according to the circumstances of the seizure. But whether the Governor's head were brought to Villa Rica, and exhibited to the troops and inhabitants as the first fruits of revolution or not, proclamation was to be made in the name of the Republic, calling upon the people to join the new Government and pronouncing the punishment of death against all who should oppose it. P. Carlos Correia had engaged his brother in the plot, who was Sergento Mor of the cavalry of S. Joan d'el Rey, and who undertook to place an ambuscade upon the road from Villa Rica to the Rio and resist any force which might be sent from that city to suppress the rebellion. A remission of all debts due to the Crown was to be proclaimed; the forbidden district to be thrown open; gold and diamonds declared free from duties; the seat of government removed to S. Joan d'el Rey, and a university founded at Villa Rica. José de Rezende Costa, one of the conspirators, had a son whom he was about to send to Coimbra for his education; he now changed his mind, detained him in Brazil, that he might be placed at the new university, and thus involved him in the plot and in its fatal consequences. Manufactories of all necessary articles were to be established, and particularly of gunpowder. This was to be under Maciel's direction because he had studied philosophy, having traveled for the purpose of acquiring information on such subjects. They consulted concerning a banner for the new Republic. Tiradentes was for having three triangles united, as an emblem of the Trinity. Alvarenga and the others thought it more appropriate that the device should bear some striking allusion to liberty, so they proposed a genius breaking some chains, and for a motto the words "Libertas pupe care tameri"—Liberty, though late—and this was approved.

puae sera tameri,"—Liberty, though late—and this was approved. The conspirators acted like madmen. They held seditious discourse wherever they were, and with all kinds of persons, forgetful that though people might be discontented the Government was both vigilant and strong, and that whatever desire might exist for a diminution of imposts, there was no desire for any other change.

Maciel felt this when he had proceeded too far and he observed to Alvarenga that there were but few to support them in their designs. But Alvarenga replied, that they would proclaim liberty for the Creole and Mulatto slaves. Another person said that the insurrection could not be maintained unless they got possession of the fifths, and unless the city of Rio should unite with them. Alvarenga, who seems to have been one of the most ardent of the party, affirmed, on the contrary, that if they could get into the country enough salt, iron and gunpowder for two years' consumption, it would suffice. Their machinations continued for some months, and several persons of considerable influence and rank in life appear to have been implicated.

Many intimations of inflammatory and dangerous language had reached the Governor before a complete discovery of the design was made, by a man named Joaquim Silverio dos Reys, and two other persons gave information shortly afterwards in the same tenor. One of his first measures was to make it known that the proposed assessment was suspended. This was an act, which, by allaying the popular discontent, deprived the conspirators of their great pretext and their main hope. Still they determined upon trying their fortune. But they were watched too closely. Tiradentes was at the Rio when he heard that the design was discovered; immediately he fled by unfrequented ways into Minas Geraes, and concealed himself in the house of one of the conspirators, still hoping that an insurrection would be commenced; but he was traced to his hiding place, arrested and sent prisoner to the seat of the Government.

The Sargento Mor, hearing of this arrest, met his brother P. Carlos Correia, by night; the Priest was terrified at the intelligence and entreated him to abscond; but he resolved that he would stand firm to his purpose, and accordingly he sent off despatches to the other conspirators, requiring them to keep their oaths, and come forward with all the force they could collect in this hour of danger. It was too late; great numbers were arrested and thrown into prison. The evidence against them appears to have been full and complete. They followed the most obvious means of defense, that of accusing the principal witness against them as the author of the plot, and representing themselves as the tempted, him as the guilty person. In this story some of them persisted till the falsehood could avail no longer, and they then admitted the truth of the charge against them.

More than two years elapsed, from the time of their arrest, before sentence was pronounced; during that time one of them committed suicide and one died in prison. Tiradentes, being the prime mover of the mischief, was condemned to be hanged; his head to be carried to Villa Rica, and exposed upon a high pole in the most public part of the city; and his quarters in like manner hoisted in the places where the chief meetings of the conspirators had been held. Though there be no cruelty in thus disposing of a senseless corpse, humanity is outraged by such exposures and it is time they were disused forever. The house in which he had dwelt at Villa Rica was to be razed, and the site thereof sown with salt, never again to be built upon; and a pillar to be erected there, with an inscription recording his guilt and his punishment. If the house were not his own still the sentence was to be executed and the owner indemnified out of the proceeds of the criminal's property, all of which was confiscated. The most barbarous part of the sentence was that his children and grand-children, if he had any, were despoiled of all their property and declared infamous. Maciel, his brother-in-law Francisco, de Paula, Alvarenga, and three others, were also to suffer death at the gallows; their heads to be exposed before their respective dwellings; their property to be confiscated and their children and grand-children, in the same detestable spirit of the old law, to be made infamous. The only difference between their sentences and that of the author of the conspiracy, was that their bodies were not to be quartered. Four others, among whom was the poor youth who should have been pursuing his studies at Coimbra, and his infatuated father, were to be hanged, their bodies not to be mutilated, nor their houses razed; but their possessions were to be forfeited, and their children to the second generation, declared infamous, as were those of the conspirator who delivered himself from prison and from punishment by voluntary death. The other criminals were banished to different places and for different terms, according to their degree of guilt. Thomas Antonio Gonzaga was one of those who were condemned to banishment There was a doubt concerning the part he had taken; both Tiradentes for life. and P. Carlos Correia denied that he had appeared at any of their meetings, or taken any share in their designs; they had used his name, they said, without his knowledge, because of his reputation and the weight which his supposed sanction would give to their cause. Tiradentes protested that he did not say this for the sake of screening Gonzaga because there was a personal enmity between them. There was no direct proof to counternail this positive testimony in his behalf; but there was this strong ground for suspicion, he urged the Intendant to levy the tax, not for the deficiency of one year's fifths alone, (which appears to have been what the Government intended), but for the whole arrears. His defence was, that he believed the Junta da Fazenda, when they tried this, would be convinced of its utter impracticability, and that by reporting accordingly to the Queen, they would obtain a remission. But this policy appeared too fine to be honest; the Judges believed that he acted in collusion with the conspirators, for the purpose of exciting discontent and tumult; and upon that opinion they condemned him. Some were to be flogged and banished, or employed as galley slaves; some were declared innocent, among them the poor man who had died in prison; and two were said to have atoned sufficiently for the suspicions which existed against them, by the confinement which they had undergone. The sentences were mitigated at Lisbon; Tiradentes was the only person who suffered death. The others who had been condemned to die were banished, some for life, and some for ten years; and these terms were afterwards shortened, as were those of all the rest. So that though the law was barbarous, the Portuguese Government deserves the praise of having acted with clemency; for however imperfectly the forms of justice may appear to us to have been observed in the proceedings against the accused, there can be no doubt concerning the nature and extent of their design.

-From Southey's History of Brazil, Vol. III.

THE CORITYBA BRANCH OF THE AMERICAN SCHOOL.

You wish to visit the American School of Corityba? Come to-morrow morning at nine o'clock and I will show you about before the session opens at half past nine. Our home, now so pleasant, has "seen life," as they say. A German built it for a school. It is well built; has, unlike most Brazilian houses, a basement where you see the stout arches that support the house. It served later for a dance hall and then was used for a soap factory, from which greasy and grimy. The task was not easy. Cleaning, painting and estate Miss Kuhl rescued it. whitewashing the house was simple in comparison with the draining, solidifying and beautifying the great yard and garden behind the house. The neighbors, all Europeans, looked suspiciously at the drainage pipes as likely to work them some They had open drains, why not we! Anybody but Miss Kuhl would have speedily had a blood feud on her hands; but with imperturbable patience, amiability and firmness she gained the day. We built a wide verandah behind, invaluable to the girls on rainy days. The long, steep staircase was replaced by one with a landing, that the girls might only have half a chance to break their necks. Our German landlord is so convinced of our value as tenants, in spite of the girls and boys that swarm by scores over his premises, that he is almost the only landlord in the city who has not raised the rent. Last year he ceiled three large rooms with boards lest some one be killed with the great pieces of plastering that fell down most unexpectedly.

* * * Good morning! You are on time, I see. Did you come in the street cars, and did the driver beat the mules? One feels like exclaiming with Miss Lobb, when her stock of Portuguese was yet limited, as she looked sternly at the driver and held up three fingers: "Three mules!"

Look at these silent lines of nice little people waiting in the hall to march over the street to the Primary. Their beautiful behavior is due to Miss Effie Lenington whose soft voice and manner of inexorable gentleness accomplishes wonders. Here comes a tiny Primary teacher to take them over, D. Maria Augusta (don't say Ma-rye-a!) She is a gem. Perfect as a pupil she is the same as a teacher; a bright resoluteness witches spoiled little ones into orderly activity.

Come into the parlor. Doesn't it look home-y? The furniture is old, old-from our own homes. The lining of books makes it delightful-the encyclopedias and older books of our Fathers, some newer ones bought here and some sent by generous friends at home who know the heart of a stranger and how everything may be made to work up a good missionary. This case of bound illustrated magazines does good service in geography classes and the Missionary Society, besides entertaining and instructing the families that gather on Saturday night to rehearse Sunday's hymns. See the great flag as a portiere in the wide hall! The stars and stripes are the first thing to meet the eye as one enters our home.

Walk through the large schoolrooms, so high, airy and well-lighted, hung with charming pictures gathered from many sources. From the verandah we can overlook the games in the yard. Just look at the garden beyond-hundreds of roses, delicate white, exquisite pink, deep red, elegant creamy buds, salmon climbers,-quantities of pinks, chrysanthemums, calla and Easter lilies, nasturtiums, honeysuckle, dahlias and long borders of violets and forget-me-nots. Besides, the school-children bring us many bouquets, and our girl-boarders in their daily walks get ferns, great bog-daisies and many dainty wild growths.

See how many children come early to school! I am proud of their zeal. | Some are here at seven, for study in many homes is almost impossible. Here, one's

own desk, the great school dictionaries and books of reference, with space, quiet and flowers, make study a pleasure.

The Intermediate classes, marshalled by our admirable D. Bertha, line up in the Great Room to join in hymns, songs and a brisk march. More lively than sweet, isn't it? Some fine voices though and many charming faces.

Do you care to listen to the classes—German with graceful, thorough Fraulein Mathilde,—English, Arithmetic, History, Geography,—then French and Portuguese with Senhor Raposo? Do they not study well and seem wideawake? Our Bible study is at the close, but you do not understand Portuguese and can only listen to the pleasant voices and read the quiet attentive faces. This is the only religious teaching that many of them receive and it cannot fail to impress.

After dinner at four, the girls in the house have a brisk walk; or, if it rains, a game of ball or bean-bags. They come hurrying back to listen to some classic story,—Swiss Family Robinson, Little Lord Fauntleroy, etc. Then in the well-lighted great schoolroom is the charming, silent, busy, evening study-hour, followed by an early tea and a long night's rest. Winter, such as we have, or summer, we rise at six, have coffee, gymnastics, twenty minutes for private devotions, a lively scramble to put all the house in apple-pie order, a short walk, breakfast, prayers,—and the decks are cleared for action!

Should you like to come Friday night for games with the girls? Sometimes we have a musical evening. English friends come in, a simple tea is handed round in the great schoolroom, and a well-bred, appreciative audience of girls applaud the pieces, vocal or instrumental.

As a woman you would be interested in the Saturday morning inspection of rooms, and the hour for mending, when a medley of articles is brought down for reconstruction,—and the letter-writing episode—after which holiday sets in.

Come into the garden and I will give you a lovely bouquet to remind you of the AMERICAN SCHOOL.

THE PAPAW TREE (MAMÃO).

This handsome tree, found throughout the tropics, and which would serve as an ornament to any garden, grows to a height of 10 to 25 feet. The cylindrical trunk is crowned by a number of large dark-green leaves, symmetrically arranged, under which the flowers and fruit, in all stages of development, from the bud to the ripe fruit, are always found, so that the fruit may be picked the year round.

Its great utility has long been known to the natives of all tropical countries as may be seen by reference to the works of travelers.

A preparation of the juice of the unripe fruit of the *Carica Papaya*, known in Brazil and Portuguese Africa as the *mamão*, is often called the "vegetable pepsin."

Thomas Drury in "*The Useful Plants of India*," states that old hogs and poultry fed on the leaves or fruit, however tough their meat might otherwise be, are rendered tender and good if eaten as soon as killed.

Brown in his "*Natural History of Jamaica*" says that the meat becomes tender after being washed with water to which the juice of the papaw has been added; and if left in the water ten minutes, will fall to pieces while cooking. Hughes in his "*History of Barbadoes*" says that if the unripe, pealed fruit of the papaw be boiled with the toughest old salted meat, it is quickly made soft and tender. Capt. Oliver says: "In Mauritus, where we lived principally on ration beef, cut from the tough flesh of the *Malagasy* oxen, we were in the habit of hanging the

.

rations under the leaves themselves, and if we were in a hurry for a tender fillet, our cook would wrap the undercut of the sirloin in the leaves and it would soon be tender."

It is not surprising that the attention of medical men should be drawn to the wonderful solvent action of the leaves and the fruit of the papaw tree so common in the tropics

Surgeon Evers, writing in the "Indian Medical Gazette," mentions cases where relief has been given in enormously enlarged spleens by administeriug a bolus made of equal parts of the juice of papaw and sugar, three times a day;—a teaspoonful of the juice being made into three boluses. The same effect is produced in children by single drop doses. It is also used with success in cases of intestinal worms; a single dose being sufficient for a case.



Papaw Tree

Dr. Peckolt, when in Brazil, succeeded in extracting the active principle of the fruit to which he gave the name of Papayotin. Dr. Bouchat also separated the active principle to which he gave the name of Papain, which was found to be identical with Dr. Peckolt's preparation. It has been used with marked success in rebellious skin particularly chronic diseases. 12 grains of papain with eczema. 5 of powdered borax in 2 drachms of distilled water was painted over the surface in an obstinate case and in less than a month the disease had disappeared entirely from the skin.

At a recent meeting of the Royal Society of Brisbane the question of the utility of the juice of the unripe papaw in the treatment of cancer was discussed. As a curative agent it was a failure; but it was found to be a most valuable palliative, on account of its *analgetic* and *antiseptic* properties, as shown, not only in cases of *carcinoma*, but also in an extensive case of *lupus*.

Extensive experiments were tried to show its pain-destroying power, as also its antiseptic action; it destroys every living cell and hence

destroys the bacterium. It is impossible to use the juice on ulcerated surfaces without danger. It destroys the bacterii and unfortunately the tissue on which they have settled. But Papaine, the isolated digestive ferment, acts differently. It destroys the bacterium by digesting it, while it cannot affect the living tissue through which blood is circulating.

Its analgetic action may be traced to the same source.

Dr. Peckolt, who made a thorough study of the plant in Brazil, says: "This herbaceous tree is, in Brazil, the constant companion of the banana and is never wanting near the huts of natives.

And rightly do the Indians honor this useful and most grateful tree, specially selected by Providence for people averse to any cultivation, for without the slightest care or labor, after a few months of growth, it yields harvests the whole year through. In respect to nutritive value the fruit cannot compete with the banana, still it makes a refreshing change."

There are three varieties known in Brazil, and of these the Mamão Melão (the melon papaw), is regarded the best, closely resembling, in texture and taste, a ripe melon.

The tree is scarcely cultivated in Brazil, but grows everywhere from seeds scattered by the birds, instead of growing from shoots, like the banana. The young plants are very hardy and are not eaten by cattle.

THE YPANEMA IRON WORKS.

We believe that the first attempt to reduce iron ore and manufacture iron in America was made at Ypanema. Two Catalan furnaces were set up by Affonso Sardinha in 1590. Work was carried on regularly until 1629, when it was abandoned because of the death of the owner. One hundred and thirty-one years later a new furnace was built with leathern bellows and a trip hammer. In a short time this



Government Iron Works at Ypanema.

experiment was abandoned and the place became a sugar mill. In 1801 a blast furnace with hand machinery to furnish the blast was erected. It is unnecessary to say that this gave no results.

In 1811 the government took charge and contracted with certain Swedes to erect *stückofen* and make bar iron. In 1814 four of these furnaces were in operation, but the ore proved so refractory that the yield was only one ton of iron for forty-one of charcoal, making the value of the metal only two-thirds that of the fuel. The Swedes were dismissed and blast furnaces erected with proper blast appliances and the system now employed was gradually developed.

S. Joãs de Ypanema (the works) is situated on the banks of the river Ypanema, near Sorocaba in the State of S. Paulo in lat. 33° 5' S., and lon. 4° 22' W. of Rio de Janeiro. The village, entirely dependent on the mines and works, has about 600 inhabitants. The mine is situated on the slope of Ypanema Mountain about two and one-half miles from the works, with which it is connected by a railway.

The ore is a mixture of magnetite and limonite, containing a large proportion of titanium and assaying 67.6 per cent. of iron. It occurs in nodules of all sizes imbedded in a micaceous clay. It is entirely free from sulphur, but as the clay

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is charged with phosphoric acid and the flux used is charged with the same it is easy to explain the one-half of one per cent. of phosphorus found in the pig iron. The clay bed containing the ore nodules is from 28 to 60 inches in thickness

and of considerable extent. It is said by Prof. Derby to have originated in the decomposition of a dike of micaceous rock containing coarse grains of nephelite which had been forced between surfaces of augito syeniti similar to that of jacupiranga, so notable for its curious substitutions of apatite for orthorlan. The decomposition of the softer portions of the dike and the surrounding rocks has resulted in the present conditions; an ore bearing vein of clay containing scales of mica between clays of an entirely different type.

The age of the formation is probably Upper Carboniferous or Post Carboniferous.

The extraction of the ore is very easy. The earth which covers the ore bed is stripped off, the clay dug over and the lumps of ore picked out by hand. As the covering earth is generally shallow the cost of mining does not exceed 30 cents per ton of ore.

The ore is then calcined by decidedly crude methods and broken in a stamp mill to the size of road metal. The cost of the calcined and crushed ore at the mouth of the furnace is \$1.60 to \$1.65 per long ton.

Power for the stamp mill and all other machinery is furnished by a water power derived from a branch of the river Ypanema and by two steam boilers. A fall of ten feet is obtained for the water power by means of a dam which sets the water back in a pond of twenty-two acres. (90.00089 m). Both overshot and turbine. wheels are used.

The steam power presents no unusual features. The power furnished is ample for the demands of the plant.

The fuel used in smelting is charcoal. This is burned on the Government's "Ypanema Fuel Reserve," by private parties who receive from \$6 to \$8 a ton for the coal delivered. The woods employed are Aroira (Terebinthaceas), Cambará (Verbenaceae), Cambuly and Guabiroba (Myrtacaaes), Cangerana (Meliaceae), Canella (Lauraceae), and Terola (Apœynaceae). All very hard woods. The charcoal is excellent.

The flux used is composed of "poor ore," clay, sand and lime, all obtained on the property. The so called "poor ore" is a silicate of the following composition:

Silica,				90.10
O the of Iron	•			. 8.10
Oxide of Iron, .		•	•	1.77
Water, .	*	. •		• /
Manganese and	Alum	una,	•	traces

This and the sand are used to correct the "dry" qualities of the ore. The lime used contains 20 per cent. of silica. The flux is composed as follows:

Poor Ore,						•		•	30.4
Clay,	•		•		·		•		11.4 22.7
Sand, . Lime,		•		•		·			35.5-100

The best results from the furnace are obtained with a charge made up as follows:

Charcoal,					•		53
Flux,				•		•	2 100
Ore, .	•	•	•		•		38-100

The furnaces used have a capacity of $10\frac{1}{2}$ tons of this mixture per day, yielding 23/4 tons of pig iron of the following composition:

γ.	23/1	tons	OI	pig non	01 0		101-		9		1 0			
>	- /4			Carbon,							2.80	to	3.20	
							•				.64	to	1.34	
				Silicon,						•	.04	10	1.24	
											.43	to	.60	
	8			Titaniu			•		•					
				Phosph	orus						.42	to	•54	
				1 nospn	or us,	•					05 71	to	94.32	
				Iron,					•		95./1	ιυ	94.52	
					a			1	~ +	~ n				

costing at the furnace door \$25.00 per long ton.

The iron has been employed for various purposes, giving results analogous to the analysis above.

The plant includes a blooming furnace and the other appliances necessary for making and working wrought iron.

In view of the fact that the government has spent fabulous sums upon this establishment it becomes a fair question, "Is it possible to develop here an industry capable of furnishing the raw material for the arsenals and dockyards of the republic?" and we are forced to answer, "No." The ore is scanty and refractory. The fuel expensive and limited in quantity; the lime for the flux is phosphoric. Only loss can come from the longer maintenance of the experiment.

(Condensed from articles published by J. P. Calogeras, C. E., in the Revista Brazileria, 1895.)

NOTE BY THE EDITOR:-The Brazilian Government has offered the works and mines, for sale.

THE FINGER OF GOD.

Rio harbor has long been celebrated for the beauty of its surroundings. The entrance of the harbor with its giant sentinel, the Sugar Loaf, on the left, the *Pico* with *Santa Cruz*, nestling at its foot, on the right; the city on its numerous



hills, in front; *Corcorado* and Tejuca forming a background on the south, while away off, across the waters of the vast bay and its hundred islands, looming up against the northern sky are seen the lofty peaks of the organ mountains,—to the left of the centre, apparently in line with the other mountain tops,—all forming the pipes of the organ,—but in reality isolated and alone, the "Finger of God" stands, 3,200 feet above the sea, a clean shaft which no adventurous mountain climber has yet attempted to scale.

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TRAVELLING IN THE INTERIOR OF BRAZIL. (PARANÁ.)

The pictures here given represent, imperfectly, the evolution of inland transportation in Brazil. There is no cut to show the first period, when goods were carried on the backs of slaves, or in canoes on the rivers, which for more than a century was the only mode of conveyance.

As soon as agriculture began to flourish and villages grew up in the interior, the patient mule, raised on the plains of the South from Spanish jacks and Andalusian mares, made its appearance,—cleaner of limb and lighter of foot than those found in North America.



Towns grew up and modern life demanded the transportation of heavier articles than the mule could carry—the ox-cart came on the scene—not as an invention of Brazil, but a ponderous article borrowed from Portugal, and probably the

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same as was used by the Phoenecians and other ancient peoples,—a short body on two immense wheels or *disks* made solid of the hardest wood, heavily ironed and fast to the axle, which revolves under the body of the cart. These carts, awkward and clumsy as they may appear, are the only vehicles possible on the



steep and narrow mountain roads of the interior. They are often drawn by four to twelve yoke of cattle. The driver goes ahead carrying a long pole, which is armed with a cruel rowel, with which he prods the oxen *backwards*. The wheel oxen *pull back*, up hill and down, so that the others have them to pull as well as



the load. These pictures were taken in Paraná, where the chief article of trade is *Matte*, or Paraguay Tea, brought from great distances tightly packed in *ceroons* made of green ox hides.

Next came the well known farm wagon, introduced by the German emigrant, and which supercedes the ox cart wherever there are good roads.

In the natural process of evolution the railway came next.

Railroading in Brazil is not the simple matter that it is in flat countries. To reach the agricultural centres, the fertile plateaux, by rail, one must climb the coast range of mountains which line the sea-board, from 2,500 to 3,500 feet high, which must be done in 30 to 40 miles.

The great Central railway does this by heavy grades and expensive tunnelling, as does also the Graciosa road, between Paranaguá and Corityba, in Paraná; the S. Paulo railway goes up the mountain by four inclined planes.



The above cut represents a curve on the Paraná road where it doubles upon itself making a closed loop; also one of the numerous tunnels.

This road is a triumph of mountain engineering.

FOLK LORE OF BRAZIL.

A superstition, corresponding to that of the wherwolf of the Black Forest and of the Pyrenees, prevails widely in Brazil, transported probably from those regions by the earlier settlers, as the name lobis-homen-man-wolf, is retained, while it is said to appear in the form of a large black dog, a mule, or some other animal.

An amusing story, also transplanted from Portugal, is told of a party of impecunious students who availed themselves of this superstition to replenish their empty purses. Several of them stationed themselves in a wood along a road where a mule train was expected to pass. These animals travel in single file, following their leader. The students seized a mule and carried it off into the woods, while one of their number took its accoutrements and its place in the file. The owner presently, discovering the fact, came to speak to him, when he gravely explained that he was a lobis-homen who had taken the form of a mule, and the time had just arrived when he must resume his proper form. The muleteer much frightened, begged his pardon most humbly for the blows and illtreatment he had received. His apologies were accepted and he retired, thinking himself fortunate in having escaped so easily from such a terrible creature. A few weeks afterwards he went to a horse fair to replace his lost beast of burden. To his astonishment he saw his old mule which seemed to be leering at him with wicked eyes. His former experience had taught him wisdom, as he supposed, and he quickly placed a respectful distance between them, saying, with a significant nod of his head: "Let some one buy you who does not know you."

Bloodshot and fiery eyes are supposed to be a characteristic of the lobis-homen, and a short time ago I was told the following-supposed to be true-incident: A young woman had fallen in love with one of these red-eyed men, and her family opposed her choice. She persisted, however, in marrying him, and removed to his house at some distance from her old home. He opposed her visiting her father and mother, and whenever she urged it, he insisted it would be the worse for her if she did. One day in his absence she went, but on her return was pursued and attacked by a large black dog, and only escaped by climbing into a tree by the wayside; the dog in the meantime springing at her and tearing with his teeth her skirt, which was of the red flannel generally worn by the country people. She remained in the tree a long time, the dog waiting for her at the foot, but he finally left and she fled to her house, her husband entering shortly afterwards. She told him of her narrow escape, but his only reply was: "I warned you that you had better not go." In the evening he fell asleep with his head in her lap, and his mouth being open she discovered to her horror shreds of her flannel skirt still between his teeth. As soon as possible she made her escape, flew to her old home and told her father and brothers what they already suspected, that her husband was a lobis-homen, whereupon they fellon him and despatched him.

The only superstition, as far as I have been able to discover, which is strictly Brazilian, is the general belief in Saxis, little malicious spirits in the form of small negro boys, who inhabit the forests, and are the bêté noir of naughty children. - They also seize grown people who are not protected by a rosary, carry them off into the forest and pull out their teeth. If they attack a person protected by a rosary and he or she can succeed in throwing it over them and binding them with it, they have secured most useful and powerful servants, equal to the genii in strength and ability. They can clear forests and do other heavy work as if by magic. If, however, they release themselves from their fetter, the work which they have accomplished is undone in a moment. The idea seems to be that of the impersonation of the Evil One and his companions.

A small sad colored bird which during certain months of the year may be occasionally seen flitting among the foliage of the thickets, and which sends out a mournful cry of "Sem fim, Sem fim,"—forever (literally, without end) is called the Saci bird. The common people will tell you that it spends six months in the region of the lost, and six months on earth, bewailing its sad fate in these plaintive notes.

A Mai das Aquas is a water syren in the form of a lovely woman, who rises from the springs and rivers clothed in rich trailing garments, with long golden hair, and seductive voice. The fishes play around her feet, as she entices disobedient children, especially, to their watery doom. Gonsalves Dias, a pleasing Brazilian poet, has preserved this superstition in one of his charming little poems.

"Fogos penantes," is the name given to the ignes fatuii, which are supposed to be wandering spirits escaped for a little while from purgatory. They hover over the low lands lying near the marshes and rivers. An intelligent Brazilian gentleman told me that he had seen them in the form of globes of fire, of apparently six inches in diameter. They appear at times in the boats and canoes lying on the rivers.

The superstitions respecting the Eve of St. John are too long to be considered in this paper. The Devil is supposed to be set free at that time, and walks to and fro in the earth. Whoever wishes to do so can enter into compact with him at that time. N. H.

THE BLACKS OF BAHIA.

Nowhere can we find a purer type of the African than in Bahia. It was the *entrepot* of the Portuguese slave trade, where the cargoes were sorted and from which point the most promising were sent south. The slaves brought over by the Portuguese were, as a rule, of a better class than those taken from the lower coast to North America; as they were in possession of the whole upper coast and penetrated the interior.





Those represented in our picture are of the *Mina* tribe—quite unlike the common *negro* of the coast. They are very intelligent and remained a very short time in slavery. Their domestic and social relations are different from those of the lower prognathism blacks and denote a certain degree of civilization in their African home. They nearly monoplize the sale of fruits in the markets.

Among the wealthy citizens of Bahia may be found blacks of this tribe. It is said that some of them visit Africa regularly. Certain it is that between Bahia and Africa there is some trade.

THE BRAZILIAN BUDGET FOR 1899.

The subjoined estimates for the coming year have been submitted by the Minister of Finance for the President's approval. In his introductory remarks Dr. Bernardino Campos observes:—

"The total revenue is estimated at 341,164,000\$, exclusive of savings bank deposits, and expenditure at 346,000,423\$, showing a deficit of 4,836,423\$ to be covered by savings bank deposits estimated at 5,000,000\$.

"For the current year the estimates voted were 342,653,000\$ for revenue and 372,812,424\$169 for expenditure, leaving the deficit of 30,159,424\$169, due to the necessity of allowing for 110,000,000\$ by loss in exchange, which was not compensated by any corresponding increase of revenue or reduction of other .

"For the calculation of revenue for the coming year, it is impracticable to adopt the usual system of taking the average of the last three years, because it originates either in taxes or duties lately created or modified, or because it has undergone so radical a change in its component elements. In consequence greater attention has been paid to actual circumstances and the causes that have determined the increase or decrease of revenue.

"As regards the import duties, for example, the principal points kept in view are the relative rate of exchange, the value of exports, the new tariff, and the "the the target of exchange" is a set of the target of target of the target of ta

"As regards revenue it is absolutely indispensible to accentuate the imperious necessity of developing internal revenue in preference to that derived by the taxation of imports. It is irregular and inconvenient that these duties should continue to be the only basis of our fiscal system.

"The urgent necessity of collecting in gold part of the duties or imports likewise becomes day by day more apparent and indisputable, as a means of reducing to a minimum the injurious oscillations of exchange. The most competent authorities are unanimous as regards its adoption. In the finance report this matter is fully discussed, and there is little doubt as to the necessity of a measure that will authorize Government to collect at least 30 per cent. of the value in gold, so that for 1\$ nominal the equivalent real value at 27d. shall be received. At the right moment the Government will fix the exact percentage to be paid in gold up to the limit indicated of 30 per cent.

"The reorganization of the different departments will undoubtedly result in a considerable economy, as has already been proved in the Ministry of Finance by the re-establishment of the old sub-treasuries.

"The estimates for 1899, it should be observed, include the sum of \pounds 1,000,000 for the treasury bills still to be paid off.

"The situation created by the agreement effected in London on June 15th of the current year is as follows:

1. "Amortization is suspended for 13 years on the foreign funded debt-and the internal 1879 gold loan.

2. "Interest on the above debts and guarantees of interest in gold are suspended, and will be paid in bonds of 5 per cent. annual interest, payable quarterly a second sec

3. "The equivalent in gold of the interest on the debt and of the guaranteed interest, estimated at the rate of 18d. per milreis, will be deposited.

4. "The new bonds emitted must be redeemed within 63 years at the rate of one-half per cent. per annum from 1911 onwards. In consequence our position is henceforth as follows:

(a) "It is necessary to vote appropriations for the amortization of the foreign debt. (1) ((7))

(b) "The appropriation destined to the payment of interest and guarantees should be now calculated at the exchange of 18d.

(c) "A new appropriation must be voted to cover interest on the funding loan. The estimates organized on these *bases* have consequently undergone the following alterations:—

"Import duties. The revenue from this source is estimated at 230,850,000\$, or little less than that voted for the current year (231,850,000\$), neglecting entirely the average of 238,800,000\$, in view of the falling-off of revenue from this source.

"For calculation of the revenue from the Central and other State Railways telegraphs and post offices, the figures supplied by the respective ministries have been adopted."

REVENUE FOR 1899.	
Import duties, storage, light and dock dues, surtaxes, etc	231,270,000\$ 150,000
Export duties	~ ~ ~ · ·
Internal taxes	
Excise Sundry (extraordinary) revenue.	
· ·	341,164,000\$
Deposits in Savings Bank	5,000,000
Total, including deposits	346,164,000\$
EXPENDITURES FOR 1800.	
Justice and Interior.	16,000,806\$
Foreign Affairs	1,832,412
Marine	26,439,932
War	46,329,295
Industry, Agriculture and Public Works	. 89,464,675
Finance	165,924,210
	346,000,420\$

HISTORICAL SKETCH OF PROTESTANT MISSIONS IN BRAZIL.

(Continued from page 78.)

III.

PRESBYTERIAN MISSIONS. (NORTH.)

In January of 1862, the first fruits of Mr. Simonton's work appeared in the organization of a Presbyterian Church in Rio. This was the first Presbyterian Church in Brazil, if not in all South America. Two persons were received at the first communion, both of whom have long since been called to their reward.



Botofogo, a Suburb of Rio.

sionary. The Brazilian people were too affectionate and generous in their disposition to be often led to these scenes. Under various workers the work of evangelization went forward uninterruptedly and there was rarely a monthly communion that did not witness a public profession of faith in Christ.

Since that small beginning the advance has been steady, though quiet and unostentatious. God's blessing has been constantly visible. In the earlier days of the work in S. Paulo there were scenes of violence and turbulent resistence, usually lacking, however, the violence seen in other papal lands. An apathy had fallen upon the country and only the efforts of a fanatical priest, who saw in the new doctrine danger to his revenue could occasionally arouse the people to the point of mobbing a misThe pioneer missionary, Rev. Simonton, passed away with a sublime confidence in the future of the work, a confidence that has been fully justified by later events.

The church organized in Rio in 1862 is now a large, rich and powerful organization, worshipping in a spacious stone edifice, with a talented Brazilian pastor and an assistant, also Brazilian,—both educated chiefly in mission schools—filled with the missionary spirit which leads them to carry the gospel to those around them. So that the entire field contiguous to Rio is no longer legitimate sphere for the foreign missionary.

The Rev. A. L. Blackford followed Mr. Simonton. He has also gone to his reward, and we shall at a future time give a sketch of his life and work. In 1861 the Rev. J. I. C. Schneider joined the mission. In 1866 the Rev. S. W. Chamberlain; later the Revs. Pires, McKee, Lenington and others, whose names will be found in the reports of the Board of Missions.

It is not our purpose to go into needless details of dates and removals.

In 1863 an important departure was made and S. Paulo was occupied as a center of operation and is the site of the educational work of the mission. The move was made after much study and discussion. Then, as now, there were those who opposed anything but direct evangelization by preaching, and minimized the value of schools; but Mr. Simonton carried his point and S. Paulo was entered. It was then a city of from 15,000 to 20,000 inhabitants; it now has 224,000, the capital of the province, now State, of the same name and the intellectual centre of the Empire, being the seat of the great law school and also large ecclesiastical institutions of learning. Its influence on the whole country through the legislators and judges it sent out was very great.

It was a field as diffcult as it was important and talent of a high order was needed for its cultivation. The work was begun resolutely, and in 1865 a church was organized. In 1870 a school was opened under Miss Dascomb, a graduate of Oberlin and an ex-teacher of Vassar and Wellesley. It was fiercely attacked, at first, but the excellence of the school work disarmed opposition. The church is now the largest and most influential of the 60 Presbyterian churches in the Republic, it is long since more than self-supporting. The little school, too, has grown into a system of graded schools, Primary, Grammar, High Schools and a College, with Manual Training School and Laboratories.

It is not our purpose to follow out the process by which the work has grown to its present proportions, but we cannot refrain from quoting a page of details from a "Sketch of the Brazil Mission," published fifteen years ago.

"S. Paulo has been, and must still be the center of influences for a vast educational work, which will give direct and future results. Schools are indispensable wherever churches are planted, and their importance upon the future of the nation cannot be overestimated. The adult population is accessible to the Gospel everywhere. Through them the rising generation can be easily reached."

"Toward the end of 1863, and during 1864, a few tracts and books, and a very few copies of the Scriptures, had been circulated by the Rev. J. M. da Conceicao, a former vicar of the parish, in the district of Brotas, a rude agricultural neighborhood 170 miles from the capital. After repeated and urgent calls to go and preach to them, they were visited in February and again about April, 1865. It was a tedious and laborious journey on horseback or muleback, over rough roads and sometimes through mere bridle-paths. The mode of work was to go from neighborhood to neighborhood and from house to house, preaching, reading, and expounding the Bible. The Spirit of God had been there preparing the way, and was present to seal His Word on the hearts of men. The truth took deep hold on those rustic, but intelligent minds. Desperadoes, who had been the terror of their neighborhoods, sat meekly at the feet of Jesus; men and their families who had sunk very low in ignorance and corruption were saved and lifted up. In November of the same year, 1865, a church was organized there, consisting of eleven converts from Rome, who were baptized in the name of Christ. The meeting at which that church was organized was held in a rude hut, made by planting poles or rails in the ground and covering it over with grass."

"Rev. R. Lenington went to reside at Brotas towards the end of 1868, up to which time there had been no settled pastor or resident missionary amongst them, yet the church had grown in three years from eleven to over seventy members. Two or three visits had been yearly made to them by the missionaries of S. Paulo; but much of the result seen was from the reading of the Word and the labor of the convert themselves. Naturally intelligent shrewd and active to them by the missionaries of S. Paulo; but much of the result seen was from the reading of the Word, and the labors of the converts themselves. Naturally intelligent, shrewd, and active, many of those unlettered men, with the Word of God in their hands, have been a power for good in their respective neighborhoods. That one little church, planted in the wilderness in 1865, had grown in 1885 into eight churches, extending from Rio Claro, 50 miles to the eastward of Brotas, to Rio Novo, 120 miles further into the backwoods on the southwest, and to other points in different directions. According to the reports for 1885 about 800 members had been received into those churches from the begining, on profession of faith. A great portion of that vast and important field is at present under the care of Revs. J. F. Dagama and J. B. Howell. Two of the churches on the extreme southwest are in the diocese of Rev. J. C. R. Braga, ordained last year." ordained last year.

"At Rio Claro there is a substantial church building. At the same point there is a day-school, and also a boarding-school for orphan and poor children, all under the management of the Rev. J. F. Dagama and his family. Schools are also maintained at several other points in the district refered to.'

"At Alto da Serra, within the bounds of the Brotas congregation, although 20 miles distant, the people erected a house, a primitive structure, it is true, to serve for a church and school-house, and also a dwelling for their teacher. The same is true of Rio Novo, and perhaps some other points."

"In some places there have been night-schools for the adults; and in some cases, old men have diligently set themselves to learn to read in order that they may be able to read the Bible for themselves and to others."

"Many of those who embraced the Gospel around Brotas had removed form the neighboring province of Minas Geraes, a distance of from one to two hundred miles. Through them the truth was carried thither to their friends and families who remained behind. And there we have to-day church organizations at Borda da Matta, Caldas, Machado, Cabo Verde, and Areado; to which 259 members have been added on profession of faith. The Rev. M. G. Torres, himself one of the truits of our mission, ministers to these churches, besides visiting and

himself one of the fruits of our mission, ministers to these churches, besides visiting and preaching as he can at many other points." "At Sorocabo, 60 miles west of S. Paulo, there is a church and school. It is the natural centre of a large field. Rev. J. Z. Miranda, a native minister, serves as pastor of this church, and also ministers to the churches of Faxina, Guarehy, and Itapetininga, besides preaching at other points in the wide district embraced in the limits of these churches." "At Lorena, about midway between Rio de Janeiro and S. Paulo, a church was organized in 1868; and 12 miles distant another church was organized in 1874. These churches are for the present vacant, but are visited occasionally by the brethren at Rio de Janeiro and S. Paulo. Lorena is the centre of an exceedingly inviting and important field of labor."

The State of S. Paulo has now 22 self-supporting Presbyterian Churches ministered to by Brazilian pastors and, with the exception of some remote corners, which will, sooner or later, be reached by the native Churches, is no longer a legitimate field for the operations of the Evangelistic Foreign Missionary.

The Evangelizing work of the Missionary, in that state, is done and under God's good Providence, well done. The missionaries not engaged in Institutions of Education have gone to the front; the Brazilian Church has assumed the direction of its own affairs-prematurely, we think,-as a whole Church embracing many distant fields still entirely dependent upon the Board of Foreign Missions for support, -- but certainly in good time for the rich churches of S. Paulo and Rio. The whole Church having, however, elected to become independent, should be left to develop strength by overcoming obstacles in its own way, guided by the word of God and its own conscience. This is obviously the natural and logical outcome of all successful mission work, and not to be able to recognize it and accept it argues a lack of the missionary instinct. While this is true of the strictly evangelistic work of the missionary, it is not true of some part of the work which he is obliged to foster as adjuncts, and which depend for their existence and maintenance upon something else than a simple belief in the Gospel, -that call for capital and capitalized experience,-that cannot be created or carried on by a simple act of faith. Such are printing houses, hospitals, dispensaries, and schools and colleges and their accessories. The Evangelist goes forward, his work is done; the institutions remain behind to be carried on by those to whom they belong or who hold them in trust.-[To be continued.]

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Editor's Drawer.

On the 15th of November, the ninth anniversary of the advent of the Brazilian Republic, Dr. Manoel Ferraz de Campos Salles, the new President, and Sr. Rosa e Silva, the Vice-President, were formally inaugurated and took the oath of office. Dr. Campos Salles is the fourth President of Brazil, and enters upon the duties of the high office with the country at peace with all the world, but under serious financial embarassments. His Cabinet, generally considered a strong one, is made up as follows:

Finances: Dr. Joaquim Murtinho, a distinguished physician and an engineer; a Senator for Matto Grosso.

Industry: Dr. Severiano Vieira, lawyer and journalist; Senator for Bahia.

Interior: Dr. Epitacio Pessoa, a lawyer and Senator for Parahyba do Norte.

Exterior: Dr. Olyntho de Magalhäes, a physician, ex-Minister to Switzerland and ex-Special Envoy to Washington.

Navy: Admiral Balthazar Silveira, ex-Governor of the state of Rio.

War: General Mallet, ex-Adjutant General, who never before held office.

The central figure of the Cabinet is Senator Murtinho, the soundness of whose financial views is well known; while Secretary of Agriculture, for a short time under the last administration, he proved himself to be a man of clear views, sound judgment, energy and honesty of purpose.

The following is a brief synopsis of the President's inaugural address:

Dr. Campos Salles accepts and endorses the arrangement made by his predecessor with foreign creditors for a three years' moratorium, and will use his best efforts to carry out the exact terms of the contract.

He presents no extensive political program, but will devote the energies of his Government to the reconstruction of the finances of the country, the development of its resources and the adoption of measures of the severest economy consistent with dignity and decorum; he will see that the revenues are honestly collected. He pronounces himself against any change in the form of the Republican Government, in the direction of a parliamentary government like that of France, in lieu of the Presidential form already in force, like that of the United States, and deprecates any agitation of the subject. His relations to Congress will be in consonance with this view.

As President of the whole country he will belong to no party, at the same time his administration will be kept strictly within the lines of the Republican principles advocated by the party that elected him. In foreign relations he will pursue an independent policy, but at the same time will endeavour to extend diplomatic and commercial relations with other nations; and will advocate arbitration instead of war in the settlement of disputes. Brazil occupies an important place among the nations of South America; he will, therefore, cultivate cordial relations with sister Republics, encourage immigration and stimulate the development of the natural resources of the country. His aim will be to have a strong government, that does not put off action, but that resolves and acts; -a government that governs.

The gist of the address is that the financial condition of the country will be improved by retrenchment and economy, and by increasing the revenues through some scheme of taxation. The income will be increased and the expenditures lessened until debts are paid and the deficits disappear; all legitimate enterprise will be encouraged, the laws will be executed and justice done; peace and good will promoted at home and abroad.

It sounds well and is not a difficult program, if supported by Congress and the people at large. The new President has our warmest wishes for the success of his administration, that Brazil may take her place among the great nations of the earth.

We give an almost literal translation of that part of the message which refers to the finances of the country, and the causes that have produced the present complications:

"What adds to the anxiety of the authorities, in the present difficult moment, is the urgent character and the intensity of the financial crisis. It is the result of the gravest errors which have long been accumulating, and which must be repaired without delay and as completely and rapidly as possible, by recognizing first of all its principal causes, which are as follows:

"Inopportune and often absurd protection in favor of artificial industries at the cost of heavy sacrifices to the taxpayer and to the Treasury;-the emission of enormous masses of inconvertible paper producing a profound depression in the value of the currency -deficits created by the enormous staff of functionaries, by expenditure of a purely local character and by the continuous addition to the inactive classes; - extraordinary expenditure not provided for by the estimates and derived from extraordinary credits opened by the Executive and by special laws enacted by Congress;-indemnities decreed by judicial sentences that amount every year to enormous sums; - expenditure on account of internal commotions; -- obligations resulting from the State insurance and deposits, and which have come to be regarded as part of the ordinary revenue; — continuous increase of the floating debt, the result of increasing deficits and the consequent increase of the consolidated debt;—the bad collection of the public revenue;—the moral effect of a bad financial policy with its discredit;—the withdrawal of confidence and, consequently, of foreign capital;—speculation, that in such a medium develops like a parasite on a failing organism;—finally the fall of exchange, the synthesis and expression of all such errors.

* * * * * *

To act with promptness, energy and perseverance with regard to all the elements that I have pointed out as agents of our economical and financial decadence, abandoning the policy of expedients and postponments, to adopt a policy of real solution is in its general lines the program of my government. I can see no other secure nor honest course that can lead to the re-establishment of normal relations with the creditors of the Republic, the supreme aspiration that the honor and dignity of the nation imposes.

MISSION PERSONALS.

Rev. J. B. Rodgers, who has been in and near Rio for the past seven years, has taken up his residence in the city of Desterro, on the island of Santa Catharina, in the state of that name, where he will engage in Evangelistic work. There is already a number of Protestants there, but no organized work has before been attempted, though, we believe, Rev. G. A. Landes organized a congregation in S. Francisco in the same state.

The island of S. Catherina, in 27°, 30' S. Lat., is separated from the mainland by a narrow channel and lies north and south 28 miles long by 10 wide. It is high and fertile. The climate is considered the most healthy on the sea-board of Brazil and the place has always been remarkably free from epidemics. Its hot springs, about four leagues from the capital, are quite famous for rheumatic complaints and disorders of the viscera. The population of the city is about 12,000. Since 1893 the city has been called Florianopolis in honor of Marshal Floriano Peixoto, the second President of Brazil.

We are glad to note that the Rev. Alvaro dos Reis, the eloquent pastor of the Presbyterian church in Rio, has been making evangelistic tours in the fashionable watering places about Rio and has awakened a lively interest in the Gospel. Even Nova Fribourgo, which has been asleep for so long, has been awakened.

This is as it should be. The foreign evangelist, preaching exclusively to natives, is always out of place in these great cosmopolitan sea-ports, and particularly so when there is a strong native church able and willing to do the work. When the foreign Boards decide to attempt the evangelization of the foreign population of these great commercial centres there will be a wide field of labor, meanwhile the foreign missionray can do the greatest amount of good in the interior.

We regret to learn that the ill health of Mrs. Lenington of Guarapuava, the distant outpost of the Paraná mission, is giving her husband, Rev. R. F. Lenington, great concern. There is a wear and tear of spirit which comes to the missionary wife in these isolated outposts, when the husband is away on his long itinerating tours, which cannot be well understood at home. We should be glad to see families sent out two by two in the opening of new fields.

We rejoice to learn that at the last meeting of the Episcopal Mission of Rio Grande do Sul, the first General Assembly of the new Church, our very dear friend, Rev. Lucien Kinsolving, was consecrated bishop of the new diocese.

We hear little of the missionary labors in Northern Brazil. It is a hard field. We are, however, glad to

note that the government of Pernambuco acted with promptness and energy in bringing to justice the assassin of Dr. Buller's native assistant. He was recently sentenced to 34 years imprisonment.

Rev. W. A. Waddell, dean of the faculty of Mackenzie College, upon whose shoulders has fallen much of the burden of local administration, financial management, of the college since its organization, goes to the United States, accompanied by his family, on his well-earned furlough. During his stay in the U. S. he will represent the BULLETIN and the interests of the college and schools.

We cordially commend him to our friends and the friends of Christian education in Latin America.

Miss Mary P. Dascomb, the veteran educator of the Brazil Mission, returns again to her field of labor in December. She goes back, as she always does, joyfully and hopefully to the work to which she has given so many years of efficient effort.

Miss Clara E. Hough is now in the United States on her first leave of absence. The Laranguiras school, during her stay here, will be under Miss Williamson. Miss Hough's address will be Meadville, Pa.

The Ladies' Mission has had a most prosperous year. Its school has been full and is conquering the prejudices of the better classes in the fanatical region centering at S. João d'el Rei. A large number have been received on profession of faith at the widely scattered points visited by Mr. Gammon on his journeys. The western part of the field was recovering the animating growth which characterized it in the days of the lamented Mr. Boyle when Mr. Morton was compelled to return to the United States. We are sure that all our readers will join their prayers to ours that the life of his brave and helpful wife, sadly threatened by consumption, may be spared.

Miss Kuhl reports that they have in the Corityba school a LIVE Christian Endeavor Society of 40 members, that the Sabbath afternoon meetings are well attended by outsiders, filling the large school room to its utmost capacity.

These are the young people who will soon be on deck, in charge of the "ship of State," and these Christian influences will be far-reaching.

The last direct report from Mr. G. R. Witte and his companion, Dr. Graham and wife, left them at the head of navigation of the *Tocantins*, about to start on their difficult journey up the cataracts to the home of the Cherente Indians. May God speed them safely on their way to light up the dark places of the "neglected continent."

We have seen letters from Mr. Wm. A. Cooke, the missionary sent by the Christian Alliance to the Indians of Goyaz, dated from the heart of the Cherente country,—*Rio de Somno*— April 18th, and May 17th, 1898.

He states that his journey across country was one of great difficulty and hardship, that he finally reached the Rio de Somno region, worn out by fever and starvation. He found, as might have been expected, the situation somewhat different from what was represented by Chief Sepé, and as he becomes better acquainted with it, we are sure that he will find that it is different from what he now thinks it The Cherentes are widely septo be. arated and live in almost independent bands; there is no Cacique, or head of the nation, but each village has its chief; while Chief Sepé truly represented the whole tribe in his journey to the coast, at home, his authority is only recognized by his own settlement.

So far as Mr. Cooke had been able to observe, it was the same old story the Indians had taken over all of the vices, but few of the virtues of the white man. The monks have had nominal charge of them for many years, but instead of Christianizing the poor *Pagans*, they have only succeeded in *paganizing* a few Christian ceremonies. An old monk is now in nominal charge of a few villages and is making violent opposition to Mr. Cooke's work, and will doubtless try to drive him out of the country.

This is far better than dead indifference. The Gospel planted amid difficulties and persecution, grows in direct proportion to the opposition to it.

At the time of writing Mr. Cooke was entirely out of funds and was awaiting anxiously the arrival of Mr. Witte and his party from the lower country. The trip up the river is a very difficult one and Mr. Cooke was of the opinion that it would take several months. The Indian sent to take them up was lured away by two monks and accompanied them, so that Mr. Witte and party was obliged to make other arrangements. As soon as relief arrives, Mr. Cooke will come to the coast for his health, seeking a new route, via Maranham.

These first attempts will be chiefly valuable in furnishing reliable data on which to organize regular work. No one will again attempt the overland trip, unsupported and without medical supplies, or without an open line of communication with the outside world.

In the articles we are publishing concerning the Cherentes we desire to have it understood that the information was obtained, and carfully sifted, from the lips of the very intelligent Chief Sepé, but that we are not responsible for its completeness or entire accuracy.

COMMERCIAL NOTES.

At the last general meeting of the St. John del Rey Mining Co., in London, the chairman made a very favorable report in regard to output, but as the water power is becoming uncertain the directors have resolved to go in for the generation of electrical power, and the chairman announced that an issue of 44,000 shares would be offered to existing shareholders at par, in the proportion of one new

share to ten old, when the shares shall stand at a market price of 24s. or 25s. Meanwhile the company is in a comfortable position, as during the past three months it has realized a profit of \pounds 30,000, with which, the chairman frankly stated, he did not intend to part. The shareholders must therefore content themselves pro tem. with the small dividend distributed (1s. for the year to Feb. 28th last). Some important observations were made as to the life of the mine, it being stated that there is in sight some 600,000 tons, or enough to last six years at the present rate of consumption, and that the work undertaken in opening further levels was expected to disclose a further fifteen years of life, if, as expected, the lode continues to go down as it has gone so far from the surface.

According to a telegram the Carrapato Gold Mining Company has been organized with a capital of $\pounds 375,000$ "emitted on the Continent of Europe," and the shares are already at a premium before mining is begun; what will they be worth after ?

The Brazilian government issued last year 294 patents and 56 caveats. Of the patentees 121 reside in foreign countries.

At the junta commercial in this city there were registered last year 252 trade marks, of which 137 were Brazilian, 45 were English, 21 Portuguese, 16 German, 12 American, 10 French, 6 Austrian, 2 Swiss, 1 Belgian, 1 Dutch and 1 Norwegian.

In Rio Grand do Norte goat skins that were selling at 4\$200 have fallen to 2\$800, and sheep skins that were selling at 2\$200 have fallen to 900 reis.

The governor of Bahia has been authorized to contract for the establishment of six sugar mills, three of which must be able to grind 250 tons of cane each in twenty-four hours and the other three 150 tons each in the same time.

Some time ago we referred to the interest awakened in the Mangabeira Rubber industry in S. Paulo. It has now reached such importance as to attract the attention of the Government, which has named a commissioner, Dr. Uchoe Cavalcante, of the Instituto Agronomico, to study the matter with a view of stimulating the regular cultivation of the plant, at present only found in a wild state. The initiative of the S. Paulo Government is most praiseworthy, as every attempt must be made to give a little more variety to S. Paulo industry, too long exclusively engaged in coffee cultivation. The Mangabeira rubber industry seems one capable of immense development, and if successful may prove of the greatest importance to the State. The quantity of rubber exported during the first half of the current year is nearly 77 tons, a very fair beginning.

In the district of Matto Grosso, near Pindamonhangaba, S. Paulo, Mangabeira trees abound and furnish occupation to laborers from Bahia, who give the owners of the land a third of the crop for the privilege of extracting the rubber. A workman, it is said, can extract three kilos of rubber per diem, worth 5\$ per kilo on the spot. In western S. Paulo and the neighboring district in Minas Garaes, there are also many Mangabeira trees, the quantity of rubber shipped on the Mogyana railway during the first six months of the present year being 1,490 packages weighing 76,498 kilos.

Col. Paulino Carlos, who is growing rice in the municipal district of Ibitinga, S. Paulo, says that a sufficient quantity of this article will soon be produced to supply all the neighboring districts.

A telegram of the 11th inst. says that it has been discovered that an excellent rubber can be made of the juice of a tree called Ataraca that grows abundantly in the state of Maranhão.

The value of the exports from Brazil to foreign countries in the year 1897 is estimated by the minister of finance in his report at 831,806,918\$, equivalent at the exchange rate of 7 23/32d. per 1, to \pounds , 26, 752, 224. The value of the imports from foreign countries he estimates at 671,603,280\$, equivalent to $\pounds_{21,567,660}$. This leaves a balance of 160,203,638\$, equivalent to £5,184,564, in favor of the exports, which, however, according to the minister, was converted into a deficit 139,796,362\$, of equivalent to $f_{4,460,050}$, by public and private remittances the to amount of 300,000,000\$, equivalent in sterling to £9,644,614.

	DUMONT	COFFEE	ESTATE	FOR	1807
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1,037,530\$100	Total output for 1897, arrobas Total amount of sales Total expense in Brazil
445,847\$494 £12,772	Balance of profit
5,715	Interest on debentures and expense in England
7,057 4,000	Net profit Dividend on preferred shares
3,057 2,500	Placed in reserve
£557	Balance carried forward
1 10,483\$560 £300 557	918 arrobas retained on estate for local sales, at average price of the crop this would be worth
£857	The evenes write obtained was

The average price obtained was...... II\$200 A much larger yield was expected the next year (this year). The total cost of raising the coffee, delivering it at Santos.commissions on sales and expenses of adminis-tration, was 6\$601 per arroba.

The above refers to several large plantations formerly owned by the Dumont Company, but now in the possession of an English syndicate. It shows that systematic, methodic management operates to decrease the cost of production and improve the quality of the coffee.

It is worthy of note that a part of the shipments of manganese ore shipped from Brazil goes to the Carnegie Steel Works in the United States, from which a shipment of rails for the Leopoldina railway has recently been received at this port. It is very possible therefore that these rails contain Brazilian manganese.

A plan has been drawn up in the French Ministry of Marine for the establishment of a line of steamers between Havre and Pará (Brazil) with a Government subsidy. The intermediate ports are intended to be Bordeaux, Oporto and Lisbon, and if the prospects should prove inviting it is intended that the boats should go to Manaos on the Amazon, which would then become the point of departure of a line of small steamers of shallow draught and able to go up the river to Iquitos (Peru), at which place trade is for the most part in French hands. It is expected that valuable cargoes of sugar and india rubber will be secured for the homeward voyages, and it is rumored that the Chargeurs Réunis Company, of Havre, will be connected with the enterprise.

SOBER THOUGHTS.

It was a deep, true thought which the old painters had when they drew John as likest to his lord. Love makes us like.-A. Maclaren.

All are not forsaken of God who think so themselves or whom others .think to be so.-Mathew Henry.

The things that belong to men must be understood in order to be loved; the things that belong to God must be loved in order to be understood.-Pascal.

The true evidence of discipleship is knowing God. Other men know something about Him. The Christian knows Him, has Him as a friend. And there is no substitute for this.-Horace Bushnell.

The Kingdom of Heaven is not come even when God's will is our law; it is come when God's is our will. When God's will is our law we are but a kind of noble slaves; when His will is our will we are free children. -- George Macdonald.

Remember it is the very time for faith to work when sight ceases.— George Müller.

"God so loved that he gave." He loves to give. We are not his children if we do not in our little degree throw back in feeble imitation that infinite giving.—Dr. Joseph Parker.

Deliver us from the stormy sea of business and the dead water of a slothful life, lest we be cast away by forgetting Thee or become corrupted by neglecting ourselves.

God often lets His people reach the shore as on the planks of a shipwrecked vessel. He deprives us of the cisterns in order to make us drink out of the fountains of waters. He frequently takes away our supports, not that we may fall to the ground, but that He may Himself become our rod and our staff. The embarassments of His people are only the festive scaffoldings on which His might, His faithfulness and His mercy celebrate their triumphs.—Krummacher.

Oh, when we turn away from some duty or some fellow creature, saving that our hearts are too sick and sore with some great yearning of our own, we may often sever the line on which a divine message was coming to us. We shut out the man, and we shut out the angel who had sent him on to open the door. There is a plan . . . working in our lives, and if we keep our hearts quiet and our eyes open, it all works together; and if we don't it all fights together, and goes on fighting till it comes right, somehow, somewhere.-Annie Keary.

RANDOM NOTES.

Education for Cuba.—The emissary from General Gomez asked to meet secretaries of those organizations which went into our Southern States immediately after the Civil War and undertook educational work. He said the religious condition in Cuba at the present time is one of unmixed skep-

ticism; the people know no Christianity save the Roman Catholic kind. That they do not want. There is none The problem is to show them else. that there is something else. General Gomez sends here rather for methods and for men and women than for money, saying that while Cubans are extremely poor they must and can do for themselves, if not all that they would want to do, at least so far as the planting of public and private schools. A hearty welcome awaits America**n** Christianity, and the emissary, Mr. Jose de Armas, is particularly well pleased to learn of the agreement between the missionary societies by which comity is to be practiced. Plans are ^k making for him to meet committees of those boards which intend to undertake work in Cuba.-The Congregationalist.

We are not greatly frightened by Sir William Crookes's address before the British Association, in which he raised the alarm that in 1931 the wheat supply of the world would fail to keep up with the population. Improved culture might more than double production, and there is immense acreage in British America and in Siberia, not to go further south, as yet untouched. —Independent.

The learned professor certainly did not mean to say that the utmost capacity to produce wheat would be reached in 1931. There are vast regions in Southern Brazil and in Argentine capable of growing wheat, which are yet unpeopled. When wheat becomes scarce it will perhaps be discovered that Brazil and Africa possess in the Mandioca (Manioc) an excellent substitute for wheat.

In the interior of Brazil bread is little used, but instead the *farinha de mandioca*, which is equally nutritious and more easily cultivated and prepared.

In estimating all sorts of food supplies we must include the possibilities of the great Amazon basin which, according to Humboldt, is capable of sustaining 100,000,000 people.

Golden Counsel to Business Men.-Following is a copy of a writing found among the private papers of Henry Cutler of North Wilbraham, Mass., who died Sept. 8. It was written for his children and was intended for them only, but they have consented to its publication. Mr. Cutler's own example tallied with his words. He was a shrewd and prosperous man of affairs. But he had clear discernments and lofty aims which lighted up all his life. He rendered signal service to Colorado College, standing by it with counsel and gifts in the days of its weakness and darkness. It is not certain whether without his aid it would have lived. Cutler Academy, a department of the college, will preserve his memory. But his careful and modest benevolence ran in many lines.

There are many business men who will be impressed by these counsels which he left to his children. He died "without a misgiving." When told by his son that he must soon pass from the world, he said: "It is all right; I am ready."

If you are possessed of ordinary intelligence and if you have gathered of God's wealth enough for a competency, it is clear the world owes you nothing more. Are you quite sure that you owe the world nothing? Do you, as so many, expect that just because you have intelligence and wealth every one is to treat you with extra consideration? Who is to care for those who have none of God's wealth or intelligence? You can pay what you owe the world by training your children to be unselfish, helpful members of the community. In doing this parental affection must be subordinated.

If you have gathered more than a competency of God's wealth, it is your grave responsibility to be sure it is justly distributed again. Don't go hence and leave this your responsibility to others who may neglect to do it at all. It is your bounden duty to be a benefactor. What you owe the world pay by aiding the poor, the ignorant. The world owes them something; this those who owe the world can pay.

Now make the only divine one of whom we know very much, Jesus Christ, your ideal, your model character. Receive and practice his gospel in the love of it and make his precepts your rule of life.

When the Master calls you may go hence without a misgiving. That's all. Signed, HENRY CUTLER. It is a very pretty proposition made by Gen. Sir Herbert Kitchener that a college and medical school be established at Khartûm, in memory of General Gordon, devoted to the education of sons of sheiks and other young men, graduation from which should qualify one to hold Government posts. It would cost, he says, \$300,000; and he believes the British public would subscribe it. That is the way war is made nowadays by nations that feel responsibility for territories acquired in war. —Independent.

Criticising the ignorant utterances of a leading Catholic paper in Rome, a Catholic paper that does not spare Protestants, and which seems to know Rome, says:

"It is strange that in Rome priests know so little of the Roman Ritual. It is because too many of those priests who take it upon themselves to teach have never administered a sacrament and know nothing of the Ritual."

That sounds a bit like Luther's talk after his visit to Rome.—Independent.

The town of Campinas has at present 4,050 buildings and a population estimated at between 25,000 and 30,000. The streets, whose number is 51, are lighted by 1,060 gas lamps. The number of business houses is about 1,500. There are three daily journals, one of which has been published for twentythree years.

"There can be no doubt that no other factor has contributed so powerfully towards the change which is steadily coming over Southern India —the creating of a new national conscience, — as the Madras Christian College. The leaders in the social and reform movement and of the National Congress in this section are for the most part old students of that institution. Undoubtedly the result is worth all that it has cost, and more."

[Extract of a letter written by David McConoughy, M. A., General Secretary of the Y. M. C. A., Madras.]

IN LIGHTER VEIN.

- "This is going too far," cried the man, as his boat swept over Niagara Falls.—*Harvard Lampoon*.

Professor (in logic): "Mr. Smith, what is the universal negative?" Smith: "Not prepared, sir."—Cornell Widow.

Difficult Retrospection. — "My friends," exclaimed the eloquent minister, "were the average man to turn and look himself squarely in the eyes, and ask himself what he really needed most, what would be the first reply suggested to his mind?" "A rubber neck!" shouted the precocious urchin in the rear of the room; and, in the confusion which followed, the good man lost his place in his manuscript and began over again.—Puck.

Curiously worded advertisements that are funny without intent are more common in the London papers, it would seem, than they are in New York publications. An English periodical offered a prize the other day for the best collection of such announcements, and the following is the result: "A lady wants to sell her piano, as she is going abroad in a strong iron frame." "Furnished apartments suitable for gentlemen with folding doors." "Wanted a room by two gentlemen about thirty feet long and twenty feet broad." "Lost, a collie dog by a man on Saturday answering to Jim with a brass collar round his neck and muzzle.". "A boy wanted who can open oysters with references." "Bulldog for sale; will eat anything, very fond of children." "Wanted an organist and a boy to blow the same." "Wanted, a boy to be partly outside and partly behind the counter." "Lost, near Highgate archway, an umbrella belonging to a gentleman with a bent rib and a bone handle." "To be disposed of, a mail phaeton, the property of a gentleman with a moveable headpiece as good as new."-New York World.

A cablegram from Constantinople says that "the Sultan wants time." He ought to have eternity.—*Chicago Times-Herald*.

De talk of wealth kain't dazzle me; Enough and some to spare I'd hab if I could only be A watamillionaire. —Indianapolis Journal.

Accurately stated. -- "I can tell you," said he, "how much water runs over Niagara Falls to a quart." "How much?" replied she. "Two pints." *Pittsburgh Chronicle-Telegraph*.

What strange things one meets when one hasn't a gun. If you have left your knife in your other pants the magazine poem you think you want to read is between two uncut leaves.— *Rochester Herald*.

"I'd rather our engagement were not announced until the end of the season," said the statesman. "And why, dear?" asked the woman he had won. "I don't want it charged that I am speculating in sugar."—Indianapolis Journal.

Higher criticism. — Ethel: "Papa, does God tell you what to write in your sermon?" Papa: "Yes, my dear." Ethel: "Then why do you scratch out so much?" Papa after a pause): "To please your mother."— Truth.

The lesson was from the Prodigal Son, and the teacher was dwelling on the character of the elder brother. "But amid all the rejoicing," he said, "there was one to whom the preparation of the feast brought no joy, to whom the prodigal's return gave no pleasure, but only bitterness; one who did not approve of the feast being held, and who had no wish to attend it. Now, can any of you tell me who this was?" There was a breathless silence, followed by a vigorous cracking of thumbs, and then from a dozen sympathetic little geniuses came the chorus: "Please, sir; it was the fatted calf."-Aberdeen Journal.

THE BRAZILIAN BULLETIN

THE SAMARITAN HOSPITAL AT S. PAULO.

A more homelike or comfortable looking refuge for sick humanity than this pretty red-brick building, built on the edge of one of the deep ravines that make S. Paulo so picturesque, it is difficult to imagine. It must be almost a pleasure to be a guest at such a place and be looked after by the pleasant, sympathetic English nurses. The hospital is a cosmopolitan undertaking, built and supported chiefly by English, American and German residents of S. Paulo and Santos under the direction and management of Dr. Strain and a staff of competent professional English nurses, who make life within its walls something to be looked back to with positive pleasure instead of horror. The new "Victoria" wing that is being erected as a memorial of the Jubilee is now nearing completion and will be ready in two months' time, completing the original plan of the architects, G. Krug & Son, of S. Paulo, to whom the greatest credit is due for so artistic and homelike a production. The hospital, when completed, will consist of large wards for men, women and children, private rooms for patients, bath rooms and W. C.'s handsomely tiled and fitted with the most approved sanitary appliances.

The new ward will be styled the "Victoria" Ward, and its cost be entirely defrayed by the subscription raised on the occasion of the Queen's Jubilee. This new ward will be a great boon, as patients not unfrequently have had to be refused, every bed being occupied. The directory hopes before long to begin the new Nurses' pavilion, a considerable portion of the funds having been raised at a bazar organized by the lady friends of the hospital.—*Brazilian Review*.

This hospital had its origin in the Presbyterian Mission of S. Paulo. The first contribution to its funds was from an humble but devout Chinese member of the church who, besides leaving in his will a small sum of money for the founding of a Protestant hospital, bequeathed to it a house and lot. Under the laws of the Empire the government confiscated the house, but the money was held by the Mission and finally turned over to the committee organized to build the hospital.

The hospital has enlarged its borders and widened its work to embrace all who need is services, of whatever nation or creed.

S. PAULO (THE CITY).

S. Paulo is quite a modern creation; a few years ago it consisted of only half a dozen streets on a single hill and some 10,000 inhabitants.

Now it covers a dozen and numbers more than 200,000 souls! Prodigious!

The prosperity of the city dates from the construction of the railway about thirty-five years ago. Before that the fazendeiros were content to live patriarchal lives on their estates, alternately wholloping and making love to their slaves for distraction, and paying an annual visit to the nearest country town, where they all then had town houses, some of the most extensive and elaborate description.

Such was the *raison d'être* of towns like Campinas or São Carlos, which with the altered order of things now find their occupation, if not gone altogether, at least considerably reduced in volume and importance.

The city of São Paulo now absorbs the intellectual and social movement of the State, and the country towns are rapidly decaying or being abandoned to foreign and workaday elements.

What S. Paulo will develope into in the course of a few years it is hard to say. Its future depends entirely on the direction that its public men give to its agri cultural and rural interests.

Up to the present Coffee has reigned supreme, no good Paulista dreaming of employing his capital or energies in anything else. The high prices and low exchange of late years brought such fabulous profits to the fazendeiro that over production was inevitable and in a very short time dissipated the dream of wealth and brought matters very near to bedrock.

Poor Coffee! It is hard to be dispossessed by a *parvenue* like *Mangebeira*, nor do we think there is any real danger.

The days of coffee are not over.

Besides coffee there are other occupations to turn one's hand to in S. Paulo. Cattle raising on the Campo lands beyond the Rio Grande and on towards Goyaz offers peculiar advantages to any one who embarks in it with sufficient capital and knowledge.

An enterprising breeder with capital to import good stock could not fail to do well. The two great cities of Rio and S. Paulo will alone afford certain markets for his products without fear of overproduction for a generation to come.

-Brazilian Review.

PERNAMBUCO.

The State of Pernambuco is an important part of Brazil. It was formerly held by the Dutch and many of the present public structures are of Dutch origin. It abounds in good harbors and the soil is very fertile. Along the coast the land is flat and sandy, but 10 or 15 miles inland it becomes hilly and runs into extensive

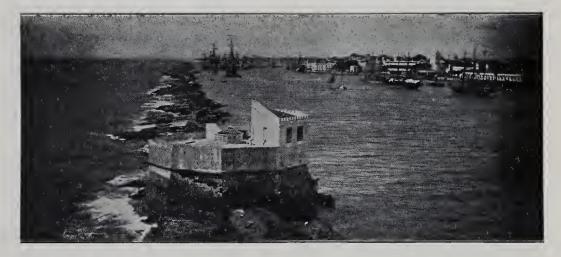


table-lands and mountains. Its ports are all formed by that wonder of nature, the *Recife* or reef, which is of coralline origin, but it seems that when it reached the surface, the insects abandoned their labor and the interstices of their beautiful fabric became choked with sand and broken shells, which, after a time, became incorporated with it and formed what in appearance is a rough sand stone.

The reef which forms the Port of Pernambuco, runs in a line parallel with the shore, about $2\frac{1}{2}$ cables distant from the island on the South and abreast of Fort Brun on the North. At its Northern extremity there is a small octagonal tower, as seen in the picture. The light-house is about 50 yards North of the tower on the point of the reef.

The City of Pernambuco—whose real name is *Recife* in $8^{\circ} 3'$ S. Lat.—is the 4th (S. Paulo having taken 3d place) in size and importance of the Republic, is divi-

ded by the rivers Bébenibe and Capibaribe into three parts. The first part, near the sea, being called *Recife*, for the reef; here are found most of the business houses and the Arsenal; the next, situated on an island, named *Santo-Antonio*, is the best and most important; the third part, named *Boa Vista*, is on the continent. The islands on which the town is built are connected by bridges, one of which is a most beautiful structure, constructed by the Dutch, when they took the place from the Portuguese in 1670. It consists of fifteen arches under which runs a strong and rapid river that comes many hundreds of miles down the country. Pernambuco has been aptly called the Venice of Brazil. The exports consist of sugar, cotton and hides.

THE FUTURE OF SOUTH AMERICA.

South America, strangely enough, has been neglected by the professor of political speculation. It is no doubt true that he has plenty to claim his notice elsewhere. The "Yellow Terror," the expansion of the United States, Japan as a sea power, Australian federation, Boer and English in South Africa, the development or dismemberment of China, are all, for example, subjects of great and immediate importance. Yet it might have been thought that the interest aroused by them would hardly have proved so absorbing as to cause the student of such topics to ignore, as he practically has done, the large question in connection with the probable historical evolution of that vast portion of the world's surface, lying between the Carribbean Sea and the Antarctic Ocean. Perhaps one reason for this curious fact is that South America is, nominally at least, already mapped out, divided and disposed of. It is partitioned into organized States, which are recognized and received as forming part of the family of nations. Its affairs are not obviously in a condition either of flux or decay. Its river systems have not as yet become the corpus vile for international exploitation and experiment like the Nile, the Congo, or the Yangtse-Kiang, and the news it periodically transmits to the outer world deals with such hundrum incidents of advanced civilization as Republican Revolutions and commercial crises. Still, if we look closely, it seems plain that there exists, potentially at least, a South American problem which must sooner or later, probably sooner rather than later, challenge attention, primarily from the promoter, and eventually from the philosopher and politician.

GEOGRAPHICAL AND OTHER CONSIDERATIONS.

Perhaps the most remarkable feature in the case of South America is that, despite the modernness and apparent completeness of its institutions, it still remains, to a very large extent, unknown country. Geographically, the southern part of the American continent stretches from north to south some four thousand five hundred miles, its area being computed as amounting to some seven or eight millions of square miles. Politically it is divided into ten independent and selfcontained states, together with three colonial possessions of European powers, and it embraces, in addition, the savage territory of Patagonia in the extreme south, partly owned by, and partly in dispute between, the two communities which lie nearest to it. The ground is thus all covered-on the map-but the crux of the position lies in the sparseness of the population. In Brazil, which is the largest state, both in area and population, the fourteen million inhabitants are spread over an extent of territory at the rate of about 4.5 persons to the square mile, while in the other states it varies from 10 in Ecuador to 2.2 in Argentina. The greatest degree of density-namely 11.7-is found in Uruguay, and this is considerably discounted by more than one-fourth of the population being concentrated in the city of Monte Video. Disproportionate urban population is, indeed, the rule all through South America; and this explains sufficiently why the greater part of the country is unknown even to the nominal owners, and why its natural resources are, in a large measure, undeveloped and unexplored.

POSSIBILITIES OF EXPANSION.

But enough has been ascertained to justify the inference that the riches of the land are vast and varied, and its geographical features are such as point to enormous possibilities of expansion and prosperity. About three-fourths of South America lie within the tropics, but the comparative narrowness of the Peninsula produces a climate so tempered by trade winds and sea airs as to render it in almost every part suitable for residents of a temperate zone. In addition, the river system is such as practically to cover all the country, and as a consequence there is a much smaller proportion of desert and unprofitable land than in any of the other continents. The forests are abundant in extent and diversified in character, the mineral wealth includes gold, silver and diamonds, the guano deposits are practically inexhaustible, all tropical produce is of course a natural staple, while the corn-growing and cattle-raising capacities of the country place it among the most valuable regions of the globe. Arising out of these facts two questions suggest themselves: Why is South America so backward in condition, and how long is she likely to continue so? To the first the answer is that it seems mainly a matter of race. Just as the Anglo-Saxon is the predominating element in North America, so the Spaniard is in the South. Yet the Iberian blood has been largely intermixed, and in its unadulterated form constitutes but an infinitesimal proportion of the population. The Indian cross, which is the prevailing type, does not make for energy, progress, or settled government, and the absence of these things furnishes the root of the matter.

PROMOTION OF EMIGRATION.

Quite recently there have been some attempts at organized emigration to South America. Arrangements were made in June by which the Government of Venezuela agreed with an Italian Colonisation Society to receive and settle on the land "a minimum of a thousand families per annum for fifteen years," the company on its part undertaking "to make two voyages monthly from Italy to Vene-zuela, and to establish within a period of three years from their contract a bank with a capital of 20,000,000 fr., 12,000,000 fr. of which shall be specially devoted to the encouragement of agriculture." Negotiations are at present in progress for encouraging emigration to Brazil, and President de Campos Salles is understood to have worked successfully towards this end during his visit to Berlin last month. The Von der Heydt Rescript, by which all emigration to Brazil was forbidden, has now been substantially repealed. Germany is willing that her sons should settle in the Provinces of San Paulo, Rio Grande do Sul, Parana, and Santa Catarina, provided that "their perfect political independence" is guaranteed. Brazil regards this requirement as not unnaturally, as relinquishment of her own sovereignty, but it is nevertheless likely enough that some solution will be found for the difficulty, in which case it is expected that the plan adopted would be extended to Switzerland and Austria .- Morning Post.

As usual with European writers the Portuguese element in Brazil, and Brazil itself, though occupying $\frac{3}{7}$ of the continent, are practically ignored. The problem with Brazil and the Spanish-American Republics is not the same. Brazil is a true Republic while those of Spanish origin are pseudo-republics when official oppression more than supplants the King. There are racial and geographical differences which simplify the problem of development in Brazil.

THE AMAZON COUNTRY.

INDIAN RUBBER.

The source of the great river, 3,500 miles in length, is in a small lake of *Lauricoche*, near the silver mines of Cerro Pasco, in Peru, at an elevation of 16,000 feet, just below the line of perpetual snow.

The first 500 miles is a succession of rapids and cataracts, but for 2,500 miles the bed is so little inclined that the difference in level between its mouth and at that distance is only 210 feet. Although under the equator, the valley of the Amazon is healthy.

This magnificent stream is now open to navigation and instead of being merely a source of scientific inquiry, its commerce is being developed by a system of steam navigation which extends into Peru and Bolivia.

The survey made by the U. S. Covette *Enterprise*, demonstrated that the river is navigable as far as the mouth of the Madeira and up the Madeira as far as the Falls of St. Anthony for vessels drawing 16 feet of water.

At Tabatinga, 2,000 miles from its mouth, the Amazon is $1\frac{1}{2}$ miles wide and at the entrance of the Madeira 3 miles wide. Manaoi, 800 miles from its mouth, at the entrance of the river Negro, is a sea-port and over-sea steamers may clear direct for that port.

The Tocantins and Tapajoz, not tributaries of the Amazon, but emptying into the Gulf of Pará, are navigable: the former 100 and the latter 800 miles above Pará.

The immense basin of the Amazon, capable, according to Humboldt, of supporting a population of 100,000,000, is almost uninhabited, except by tribes of wild Indians and a few settlements along its banks.

English, German and French capital is being rapidly attracted to this rich field; but, strange to say, it seems to have entirely escaped the attention of Americans.

Its range of production is very great, embracing many articles of food and material for manufactures. Its immense supply of fine timber must soon attract the attention of the old world.

At present its exports consist almost exclusively of forest products among which rubber holds the chief place. An interesting account of this industry was published in the June number of the Geographical Magazine for 1877, written by Robert Cross.

We copy the following from the valuable report of the British Consul at Pará, recently issued by the Foreign Office of England.

AMAZONIAN FOREST.

The vegetable kingdom is very well represented in this State. The plants and trees furnish gums, resins, nuts, oils, spices, dyes, building and cabinet woods, aromatic essences, medicinal and other industrial properties. A list and description of even the chief of these would be too lengthy for this report. Besides over 100 varieties of palms, the forest contains over 20,000 different kinds of trees, all scattered about so much that it would be difficult to find more than two or three of the same kind in one square mile. It is, perhaps, due to the solitary habits of the Amazonian flora that building and cabinet woods are not exported.

INDIARUBBER INDUSTRY.

There are many varieties of elastic gums, produced in all tropical parts of the world, which are chemically allied, but obtained from many varieties of several orders of plants, and used for different purposes in commerce. The gums are commonly divided into two classes, viz., indiarubber and guttapercha. The principal commercial difference is that indiarubber is elastic, whereas guttapercha becomes hard and inelastic when kept in a cool temperature. For this reason the latter is used for the insulation of submarine cables.

The following table gives the amounts of imports of indiarubber into Europe and the United States during the calendar year 1896:---

		To United	
	To Europe.	States.	Total.
From South America	8,858 tons	10,406 tons	19,264 tons
From Central America	789 tons	984 tons	1,773 tons
From Africa	6,548 tons	2,663 tons	9,111 tons
From East Indies	776 tons	617 tons	1,394 tons
Total	16,871 tons	14,670 tons	31,541 tons

The best qualities come from the following places:—Upper Amazons, Lower Amazons, Madagascar, Accra, Central America, Lagos, Congo, and East Africa. Upper and Lower Amazons produce the same kind of rubber, but that coming from up-river obtains a slightly higher price because it is drier than the latter. The former has time to dry while it is conveyed from great distances to a port of shipment from the Amazons.

DERIVATION OF NAME.

The first scientific description of the South American rubber tree was made by Aublet, a French botanist, who studied the plant in French Guiana. In 1775 he named the tree "hevea guyanensis." He stated that it was called "hévé" by the inhabitants of the province of Esmeraldas, near Quito; "siringa," by the Garipou Indians; "pao seringa," by the Portuguese of Para, and "caoutchouc" by the Maïna Indians. "Siringa" is probably of onomatopœic origin. From the beginning of this century until about 1865 British and German botanists named the rubber-trees "siphonia." But in 1865 Müller re-established the generic name given by Aublet.

DATE OF DISCOVERY.

Rubber was first introduced from South America into Europe in 1736 by the French astronomer, La Condamine. He reported that Peruvian Indians used it for various purposes. South American Indians inhabiting the Amazonian forest were the first manufacturers of Indiarubber. The world is indebted to them for the pear-shaped rubber syringe, goloshes and rubber water proofing. An English artist discovered in 1770 that the new gum was admirably adapted for rubbing out pencil marks. He wrote a paper on the subject, and informed his contemporaries that a cubic inch of this substance, costing only 3s., would last for years. It was used for no other purpose in England than effacing lead pencil marks for about half a century after this discovery, hence the name "rubber." After the introduction of the raw material, and the scientific description of the plant by Frenchmen, it was first manufactured into waterproof clothing in France toward the end of the eighteenth century. Later on the firm of MacIntosh, of Manchester, manufactured water proofs on a large scale. The raw material was formerly exported in the shapes of shoes and bottles.

"HEVEA" TREE.

The "hevea" tree is not conspicuous, and resembles many other forest trees. People have travelled for thousands of miles through the rubber region, and have lived for years in the centres of the industry, without even noticing it. The newcomer invariably expects to see the familiar glossy dark-green leaves of the "ficus," and is disappointed with the insignificant appearance of the "hevea." In appearance it is more like the English ash than anything else. It grows to a height of upwards of 60 feet. The leaves are trifoliate. The blossoming season is in August, and the fruit ripens in December and January. The seeds should be planted as soon as possible, as they soon lose their vitality.

The localities where rubber trees thrive the best are on islands and low ground near rivers where the banks are periodically inundated. Ground that is above water at all times or that has no drainage is not suitable to the tree.

A peculiarity of the rubber tree is that it will not grow satisfactorily on cleared and open ground. It requires the shade of other trees, and still air, from the time that its growth begins until it becomes an adult tree. Without these conditions the supply of milk is very much affected. In fact, the tree has been known to die soon after the clearing of the ground around it.

No cultivation worth mentioning has been attempted in the Amazons region. It is considered useless to invest capital in cultivation so long as the Amazonian forest shows no signs of exhaustion. The "hevea" requires about 15 years to mature—that is too long for the ordinary investor to wait.

Some people suppose that the supply of Amazonian rubber may become exhausted in the near future. The most competent authorities are not at all of this opinion, but maintain that the supply is inexhaustible, because the "hevea" is continually being reproduced by nature. Certainly some areas become exhausted when overworked, but when left alone for some time they recover. The district of Cametá, on the River Tocantins, gave an excellent quality of rubber. There was a special quotation for it in the foreign markets. This district, however, is now exhausted, because, for about 40 years thousands of men have tapped its trees. All new comers flocked to Cametá to make their fortunes. There are many districts that have not been tapped.

The area that is known to produce Pará rubber amounts to at least 1,000,000 square miles. Further exploration will no doubt show that this area is underestimated.

The richest zones, as at present known, are along the banks of all the southern tributaries of the river Amazons, and on the islands in the main stream and near Pará. The most prolific part is on the river Aquiry or Acré, one of the tributaries of the river Purús. Here 100 trees yield as much as one ton of rubber per annum. The northern tributaries of the Amazons do not produce much rubber. Of these, the river Negro produces the most. The quality, however, is soft. The river Branco yields very little rubber, and the upper part runs through pasture lands and high ground which is not suitable for good rubber. Some of the other northern tributaries have not been explored, and may yet reveal large stores of rubber. The "hevea" is known to exist on the banks of the Japura, but that district has not yet been opened up.

It was at one time imagined that the excellence of Para rubber was greatly due to the kind of fuel used in curing it. The palms that furnish this fuel were accordingly transplanted to Africa with a view to making Para rubber there—the experiment, however, has not succeded. The reason why the nuts are selected in Brazil is because they emit a continuous dense smoke, and are more palatable than other fuel obtainable. However, when none of the palms named are present, then bark and twigs are used as fuel.

PROCESS OF EXTRACTION.

Having erected a hut and obtained the requisite equipment, the collector proceeds to gather rubber and fuel. He leaves his hut equipped with an ax and knife, a basket containing cups and clay and a gourd. He has to use the knife in order to cut his way through the undergrowth, and also to cut down a sapling occasionally to bridge a rivulet. At times he is knee deep in ooze or up to his waist in water. On arrival at a rubber tree he chips away the rough parts of the bark, makes a more or less smooth surface, attaches a cup, and makes a small gash above it for the sap to fall into the cup; and repeats this process in a line round the tree until he has reached five or six cups. Then he proceeds to the next tree and does the same. He continues this process until he has tapped from 60 to 150 trees. On following days the gashes in the trees are made a little lower than those made previously. Some trees are far apart, but when comparatively close together a collector can attend to 120 or 150 trees in a day. Some collectors tap the trees in the morning and return to collect the sap in the evening ; whereas others tap in the evening and collect in the morning.

CURING.

When the accumulation of rubber is sufficient—usually the collection of three or four days—the collector lights a fire in his hut, places the funnel over the fire, and ladles a thin coat of milk over the paddle and holds it over the smoke to coagulate; the process is repeated until a large cake has been formed. To release the paddle from the cake it is necessary to make a slit on one side. The paddle mould makes a cake of uniform and even shape. The paddle is in general use in the State of Para. In other parts a spit is placed on two upright forked sticks, and given a rotary motion. By this means the rubber is cured with greater ease. Paddle smoked rubber is preferred as it is drier and more carefully cured.

Many attempts have been made to introduce improved curing apparatus. Up to the present, however, they have not been received with popular favor, because the universal process, although very primitive, possesses the advantages of being simple and inexpensive. The process of curing rubber is very injurious to the eyes. Many cases of total blindness result from it.

There are three grades of Para rubber, viz., fine, medium, and coarse. The best quality is classified as fine. If rubber is not uniform and contains impurities, it is classified as medium. The coarse quality or "Sernamby," consists of scraps that have not been cured.

An expert collector gathers seven lbs. of rubber in one day in the Lower Amazons, but three times this amount is collected in the Upper Amazons in the rich parts.

The collecting season in the Lower Amazons begins when the waters have subsided (about July), and ends in January or February. Collecting is not undertaken as a rule in the wet season, because the quantity of water that accumulates in the forest impedes the movements of the collectors, and the rain water that runs down the trunks of trees prevents the clay cups from adhering to the bark, and also because the sap is weaker in this season. The collectors employed are principally Brazilians, immigrants from the neighboring States of Ceara, Maranham, and Piauhy, and from Portugal, together with half-castes. The pure South American Indian is of very little use as a laborer. He has few wants, lives by fishing and hunting, and is less dependent on labor than more civilized people. There are many thousands of collectors engaged in the rubber industry, but the number is not nearly sufficient.

The last few years have shown a steady increase in the exports of rubber. From this one would gather that the supply of labor has correspondingly increased. The increase is very much due to the frequent droughts in the State of Ceara, and distress in the once flourishing State of Maranham, that formerly derived its wealth from cotton. The very remunerative rubber industry attracts laborers from those states. However, their attachment to their homes is so great that they return to them as soon as they have accumulated a small competence.

As a general rule the landowner makes advances to the collectors for their outfit, food, etc., and in return receives the rubber collected by them. He then sells the produce on the collectors' account, and keeps 20 per cent. for himself, and continues making advances in cash and kind in such manner that the collector should always remain in his debt, and consequently in his service. It frequently

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happens, however, that the collector takes the advance and fraudulently disposes of the rubber to any buyer who may be at hand. A great deal of leakage occurs in this way, and I believe no method of preventing it has been found yet. This is another of the difficulties of the landed proprietor. One of the methods in practice is to lease the trees in lots of 60, 100 or 150 at a given sum per annum, and to stipulate that the lessee should sell his rubber and purchase all his requirements from the lessor. The lessee works his lot to the utmost, and usually earns a handsome profit after paying the rent for it; and although the lessor does not obtain the full value of the lots rented, he makes up for it by charging commission on goods supplied, etc.

PROPRIETORS' PROFITS.

The profits would seem to be large, because the employer keeps 20 per cent., and makes about the same or more on the goods supplied to the employees; but it must be considered that, out of 100 employees, whose outfit and traveling expenses have been advanced, about 75 die, desert, or return to their homes on account of illness. The expense incurred for them is accordingly a dead loss, and when deducted from the total income of the employer his profit is considerably reduced. It is difficult to find out what the real profits and losses are, because many of the so called landowners are uneducated men who keep no account books. Although their expenses for labor are heavy, as a rule they pay nothing for the land they have squatted on, and through the "Aviador" credit system they pay no actual interest for money lent. Some pay for goods in cash, but usually acquire them on credit. Some of the estates pay well, and no one would part with one of these unless he could get considerably more for it than it is worth.

IRACEMA.

A LEGEND OF CEARÁ: BY JOSÉ DE ALENCAR.

[Continued from page 103.]

III.

"Why," said Iracema, "have you left the cabin where you have been entertained, without taking the parting gift? Who did evil to the white warrior in the land of the Tabajaras?"

The Christian perceived how just was the complaint, and recognized that he had been ungrateful. "No one injured your guest, daughter of Araken. It was the desire to see his friends that has taken him from the fields of the Tabajaras. He was taking no parting gift. But he carried in his heart the memory of Iracema."

"Had the memory of Iracema really been in your heart, it would not have let you go. The wind does not raise the dust in the meadow when it has drunk the water of the rain." Sighing, the maiden continued: "White warrior, wait till Cauby returns from the chase. Iracema's brother has the subtle hearing that perceives the boicininga (rattlesnake) among the forest sounds, and the sight of the oitibo (a species of owl)that sees best by night. He will guide you back to the banks of the river of the hawks."

"How long will it be before your brother returns to Araken's wigwam?"

"The sun about to rise will bring again the warrior Cauby to the plains of Ipu."

"I stay, daughter of Araken, but if the returning sun bring not the brother of Iracema, it shall take the white warrior to the home of the Pytiguaras."

Martin returned to the cabin of the chief. Iracema's white hammock, perfumed with the gum of the beijoim, lulled him into a calm and peaceful slumber. As he went to sleep, the Indian girl's mournful song mingled with the rustling of the forest leaves, and the notes of the nocturnal birds, and the cries of howling beasts.

IV.

The field-cock raises his scarlet crest from his nest. His shrill crow announces the approach of day. Darkness still covers the earth. The savages are already gathering their hammocks in the central taba and are going to the bath. The old pagé who had kept vigil all night, talking to the stars, exorcising the evil spirits of the night, stealthily enters his cabin.

Hark, the boré (bamboo war flute) resounds through the valley! Swiftly the warriors seize their arms and rush out of doors. When all were in the circular plaza, onto which opened all the houses, Irapuam, the chief, gave the war-cry. "Tupan has given to the great Sabajara nation all this land. We guard the mountains whence flow the brooks with the cool vales where grow the maniva and cotton, and we leave to the barbarous 'Potyguara,' eaters of shark, the bare sands of the sea, with its dry plateaus, without water and without forests. Now the fishermen of the beach, always vanquished, have let in by sea the white race of warriors with fire, enemies of Tupan. Already their boats are on the Jaguaribe; soon they will be in our land; and with them the Potyguaras.* Shall we, lords of the villages, do as the dove that cowers in her nest, when the serpent entwines himself around the branches?"

The angry chieftain shook his javelin and hurled it into the midst. "Irapuam has spoken," he said.

The youngest of the warriors advanced, saying, "The hawk poises itself in the air. When the dove rises it falls from the clouds and tears its victim to pieces. The Tabajara warrior is like the hawk." There was a burst of approving cries. The youth raised his tacape, and in his turn brandished it. Whirling in the air, swift and threatening, the chief's weapon passed from hand to hand.

The old Andira (Bat), brother of the pagé, let it fall and stamped on the ground with a foot still strong and agile. The people were astonished at the unusual action. A vote for peace from so experienced and impetuous a warrior! He is the old hero who has grown up in bloodshed; it is the fierce Andira who has cast down the tacape, token of the coming strife. Uncertain all, and silent, they listen. "Andira, the old Andira, has drunk more blood in war than have drunk *cauim* in the feasts of Tupan all the warriors his eyes now behold. He has seen more combats in his life than moons have passed over his head. How many Potyguara heads has his implacable hand scalped before time took away the first of his hairs! And the old Andira never feared that the enemy would tread his father's land; but he used to rejoice when he came, and felt youth spring anew at the war-cry in his decrepit body as the dry tree sprouts again with the breath of spring. The Tabajara nation is prudent. It should lay aside the war-javelin to take up the festive trumpet. Celebrate, Trapaum, the coming of the canoes and wait till they all arrive in our land; then Andira promises you the banquet of victory."

At last Irapuam burst forth with deep anger. "Stay thou, hidden among the wine-vessels, stay, old bat, since you fear the light of day, and only drink the blood of the victim who sleeps. Irapuam carries war on the handle of his tacape. The terror he inspires flies with the fierce note of the boré. The Potyguara has already trembled hearing it roar in the mountains louder than the noise of the surf.

* This nick-name of the Pytiguaras comes from "poty" and means shark-eater.

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Martin was walking among the high joazeiro trees which surrounded the cabin of the priest. 'Twas the time when the sea-breeze comes from the ocean and sheds its delicious coolness over the dry interior. The plants revive, a gentle motion stirs the leaves of the forest. Martin was watching the sunset. The darkening shadows creeping down the mountain sides threw their quieting influences over his spirit. He remembered the place where he was born, and the dear ones he had left behind. Will he ever see them again? The day is dying; the breeze murmurs through the leaves; the silence grows oppressive. Iracema stopped before the young warrior. "Is it the presence of Iracema that disturbs the serenity of the stranger's face?" Martin looked gently at the girl and replied: "No, daughter of Araken, your presence rejoices like the morning light. 'Twas the remembrance of my home that brought sadness to my heart." "Is a bride waiting for you?" His eyes fell. Iracema's head drooped like the tender palm in the rain.

"She is no sweeter than Iracema, the maiden with honeyed lips, nor more beautiful," murmured he in reply.

"The flower of the woods is beautiful when it has a branch which shelters it or a trunk around which it may twine. Iracema does not live in the soul of any warrior. She never felt the radiance of his smile."

Both were silent with downcast eyes, while their hearts beat faster. 'Twas the girl who spoke finally: "Joy will return soon to the soul of the white warrior, for Iracema plans that he shall see before night the bride who awaits him. Come with me."

(To be continued.)

RELIGIOUS INSTRUCTION IN SCHOOLS.

There is much vague talk about religious instruction in schools. We desire to show what we think about it by showing exactly what we are *doing* about it. A school differs from a church, and its processes must differ. The preacher tries to persuade people to become Christians; the educator strives to educate into Christian knowledge, belief and living through regular developmental and educational processes.

The following copy of one of the annual circulars to the teachers of the South American schools is only an outline of what is expected of them; not a hard-andfast rule. Each teacher is expected to prepare a working plan in detail for his or her room and report on work actually done, at the end of the year.

Previous articles may be found on pages 40 and 104 of the BULLETIN.

THIRD AND FOURTH GRADES, PRIMARY.

EIGHT AND NINE YEARS OF AGE.

In these grades every pupil should commit to memory The Lord's Prayer, The Ten Commandments and The Bratitudes.

The Bible stories told in previous grades are extended and enlarged, always keeping, however, to the *personal character* of the narrative. The story may be prefaced by a verse or two of Scripture relating to it. The following texts of Scripture are suggested as suitable reading, not as a task, but

read so often that they are remembered: Psalms I; 1-3. XXIII; 1-6. CXII; 1-8. L; 1-8. Matthew V; 1-9. Proverbs I; 7. II;
5. III; 13-17. IV; 7. VI; 18-19. In the Fourth Grade, a Psalm (the 24th) may be read responsively: Teacher reading verses 1-3. Pupils all together, verses 4-6. Teacher, verse 7. Pupils, "Who is this King of Glory?" Teacher, the rest of verse 8 and all of verse 9. Pupils repeat, "Who is this King of Glory?" Teacher, verse 10.

Properly managed it can be made a very impressive exercise and will make a variety. New hymns that may be learned: "A historia do Evangelho." ("The Story of the Gospel.") "A Deus Pae demos gloria." ("To God be the Glory.") "Tenho lido da Bella Cidade." ("I have read of a Beautiful City.") "Oh! que bellos hymnos." ("Ring the Bells of Heaven.") "Moços! declarae guerra contra o mal." ("Sound the Battle Cry.") "Trabalhadores do Evangelho." ("Ho! Reapers in the Whitened Harvest.")

INTERMEDIATE GRADE-TEN MINUTES.

One question from the "Child's Catechism" may be put on the blackboard, each day, and made a part of the morning reading lesson; the question being read by one pupil and the answer by another.

The verses of Scripture which tell the Bible story, may also be read by one or two of the best readers of the class, as a distinction,—or by teacher. These verses must be selected with great care, so as to contain the essential facts of some sketch of character.

The following hymns may be learned: "Camaradas, a divisa!" ("Hold the Fort!") "Jesus, quão infinito." ("Jesus, how infinite is Thy love.") "Oh, vinde, cantaremos." ("Oh, come, let us sing.")

"Divino Salvador." ("Savior Divine.")

Care should be taken that pupils coming from other schools know the Lord's prayer and the Commandments.

If properly managed the time is ample for the exercise, without hurry or confusion. The following order is suggested:

Reading, carefully selected beforehand, 4 minutes.

Lord's prayer, or short one by teacher, (ample) 11/2 minutes.

Hymn, two verses in one or two periods, (ample) 11/2 minutes.

This leaves three minutes for roll call.

The reading exercise may be profitably varied by occasionally having the two classes read responsively, in concert, a Psalm,—the 23d or 41st—1st, 2d, 3d and 13th verses. The Sermon on the Mount. James I; 22–27. 1 Cor. XIII.

GRAMMAR SCHOOL.

FIRST, SECOND AND THIRD CLASSES.

Continue sketches of Bible characters and great events of Sacred History, connectedly, reading the story from the Bible. The selection of the verses which tell the story clearly is a critical matter and requires care. It is to be supposed that every teacher of youth is a student of the Bible; if so, it will give little trouble and much pleasure.

One question and answer from the "Shorter Catechism" should be put upon the black-board every day and allowed to remain all day; if there be a pupil who writes particularly well upon the board, he or she may be delegated to do this; it becomes a part of the morning reading lesson, as in the intermediate.

The time and order of exercises, the same as in the intermediate.

Responsive readings of Psalms, Proverbs or the Gospel may be used to vary the exercises, by teacher and pupils or by the two classes.

If singing of hymns disturbs the neighboring classes, it may be limited to a single verse.

FOURTH, FIFTH AND SIXTH CLASSES.

These classes take up the systematic study of the Bible and have a 40-minute recitation, always under an ordained minister or a missionary or person of ripe Christian knowledge and character.

The course adopted by the mission may be used to determine the scope of the work, but

details must be left to the teacher. The general closing exercises, attended by all of the pupils of the Grammar and Inter-mediate grades and many of the Primaries, are conducted by the principal or his substitute. The Scripture is intended to convey clearly some definite truth each day.

Here the list of hymns may be extended indefinitely.

If the Bible work be well arranged, beginning with simple, little stories suited to the infant mind, followed by the same character sketches and stories, enlarged and enriched with new incidents, gradually widening the circle, but preserving the historical order, fixing the characters, when possible, by a distinguishing title, as: Adam the first, David the Psalmist, Saul the Magnificent, Moses the Law-giver, etc., etc., by the time the pupils have reached the fourth class of the grammar school, they will be familiar with the leading facts of Sacred History, and will have learned many of the great truths contained in them. They may now take up the systematic study of the subject.

THE BRAZILIAN BULLETIN.

BRIEF HISTORICAL NOTE OF THE PROTESTANT COLLEGE AT S. PAULO, BRAZIL, EMBRACING "MACKENZIE COLLEGE."

The College was incorporated by the Board of Regents of the University of the State cf New York in July, 1890. The purpose which the trustees had in view in seeking incorporation in this country was to extend and perpetuate the type of Christian education commenced by the Presbyterian Mission in 1870, form an institution of learning of high grade, which should represent the American type of higher education and the American theory, that the ideal school is the ideal community, and thus give to Brazil a complete system of American schools on a Christian foundation.

Permission had been granted to the Mission in 1880, by the General Assembly of the Presbyterian Church in the United States of America, to found, at S. Paulo, Brazil, an undenominational Christian College, and this was it. The mission school had grown into a complete graded system of primary, intermediate, grammar and high school instruction with more than 500 pupils of both sexes, having a Normal class for training its own teachers, a manual training shop under skilled direction—the first and only one in Brazil—and a Kindergarten, also the first one in Brazil. It was patronized by all classes and had more applicants than



College Residence.

places. Out of it had come, largely, the reorganization of the public schools on the American model. The time had come to provide an American College for the pupils of the American school who had finished the graded course, and for as many others as cared to come, and could pass the entrance examinations.

As soon as it became certain that the College could hold property in Brazil under its New York charter, the Board of Missions turned over to the trustees about four acres of land, which had been given by the Rev. G. W. Chamberlain and wife, and two buildings, one used as a boarding house for about forty pupils of the school; the other, built with funds given by John Sinclair, Esq., of New York, and in use as a manual training school. Through another donation of 5.000 square meters of land, by Rev. and Mrs. Chamberlain, a gift of \$2,500 from Col. J. J. McCook, of New York, and funds solicited in the United States, contiguous properties were added, making the total land holdings of the College to-day 34,482 square meters, or about 8.6 acres, located in what was formerly a suburb of the city of S. Paulo, but now within city limits and in a populous neighborhood. This land has enormously increased in value, being now worth two hundred times its original cost.

In 1891, John T. Mackenzie, Esq., of New York City, offered to the College \$50,000 for the erection of a three-story building, to be known as Mackenzie College and to be occupied in connection with the work of the Protestant College. Of this amount only \$42,000 was received before his death. With this money a fine building was erected after the general style of the Mark Hopkins Memorial Hall at Williams College. This is now the main College building, occupied for recitations, lectures and laboratory, the third story being also temporarily used as a dormitory. In 1894, an additional house was built for the smaller pupils of the lower school, with funds given by Dr. Gunning, of Edinburgh, Scotland. In 1896, a refectory was built for the college students.

This, with the house occupied by the President, and a small house on the land purchased by Col. McCook's gift, constitutes the property now held, in fee simple, by the College.

The College was opened in 1892, with a small class of students who had completed the course in the Mission school, taking up the equivalent of the Senior preparatory work of the American academy.

It was found that students entering from other schools came very poorly prepared as to their ability to study, though they could pass our entrance examination, and that the class could not be held up to severe college work without a larger proportion of students trained in could not be held up to severe college work without a larger proportion or students trained in American methods of study; for these reasons a *second* preparatory year was added and the sequence of classes interrupted until a larger group from the lower school could be ensured. At the beginning of 1894, a strong class came up, which has since been doing satisfactory work. This was the real beginning of the College. We are now assured of an unbroken suc-cession of classes advancing regularly towards college entrance. The rate of increase has been thirty-eight per cent. per annum, in spite of a high standard of entrance examinations, for all who have not come regularly up through the graded course and the high grade of work for all who have not come regularly up through the graded course, and the high grade of work demanded after entrance.



A Glimpse of the Day- School.

In 1895, the Board of Foreign Missions transferred to the College the entire control of all departments of the mission school, as well as control of the property, thus unifying the work of education. The mission schools at Bahia, Larangeiras and Curityba are administered as branches.

The total enrollment for 1897, in all departments, was 528 pupils and students; of this number 60 were in the College. The class in full work from the beginning of the year was Six who had been conditioned in the beginning of the year were able to enter the class in

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Nineteen of these teachers and three of the assistants were entirely educated in the school, from primary school to end of Normal course.

THE COLLEGE YEAR.

Being situated in the Southern Hemisphere the *long* or summer vacation comes in December and January, and the college year corresponds to the calendar year. The year is divided into two semesters; the first beginning on the first Wednesday of February and closing on the last Thursday before the 23d of June; the second beginning on the first Tuesday in July and ending on the last Thursday of November.

The school year is identical with that of the college, except that it begins two days earlier and closes a day later.

The national holidays of Brazil and the religious holidays of the Church Universal are observed.

ENTRANCE EXAMINATIONS.

Examinations are held on the Monday and Tuesday preceding the opening of the first semester and the Monday preceding the second semester for those students who were *conditioned* at the beginning of the year. A student may not be conditioned in more than two studies and these must be made up by the end of the first semester.

COURSES OF STUDY.

The college conducts a six years course under one administration and with the same faculty. This course is divided into two sections of three years each. The first consists of two years of High School work and the *Freshman* year of the American system and is known as the *Curso Superior*, or *Gymnasium*. It is all strictly required work and completes the *Disciplinary* studies. This is the second section of the secondary course of six years and is under the college faculty, the first section being in the lower school. The second division, or College, is made up entirely of elective courses.

REQUIREMENTS FOR ADMISSION.

For admission to the College course, a student must be *16 years old, of good moral character and must pass a satisfactory examination in all subjects embraced in the first five years of the secondary course. In the regular course the final examination would come a year later, but in order to conform to the requirements of the Board of Regents of the University of the State of New York the formal college entrance examinations are held at the end of the fifth year of the secondary course at the minimum age of 15* years. At this point the student has had the full equivalent of what is demanded in the American four years High School or



A Group of Pupils in "Internato."

Preparatory course (much more in Latin, Portuguese and two modern languages). The "maturity" examination is, however, not held until the secondary course is completed, which embraces the work of the Freshman year of American colleges.

DEPARTMENTS OF INSTRUCTION.

MATHEMATICS.

All of algebra; geometry, analytic and descriptive; trigonometry; calculus, land surveying, mechanical drawing.

Professors Waddell, Barreto and Instructor Armstrong.

MECHANICS AND PHYSICS.

These branches receive the same attention as 15 given in American colleges. Professors Shaw and Frick and Instructor Waller.

PORTUGUESE.

This is the language of the country and is given the place recently accorded to English in the United States. It takes up the study of later Latin, out of regular course, with that of

*Equivalent in physical and mental development to 17 or 18 years in our country.

early Portuguese, which is a kind of Latin. It continues through the entire school and college course. Comparative grammar and literature very thorough.

Professors Sanctos Saraiva and Carvalhosa.

MODERN LANGUAGES.

This branch receives much more attention than is given in any American institution. The study of English and French commences and is practically finished, as to the grammar and ability to translate at sight and write fairly well, in the preparatory school. At the end of the fourth year of secondary course the students receive instruction and use text-books in French and English. The course of English literature and reading is the same as demanded in American colleges; that of French is equivalent to that demanded by the French Lyceë. German is elective and is little studied.

Professors Caperan, Lyon, Armstrong and Aldridge.



In the Laboratory. CHEMISTRY.

This takes three semesters; all of second and half of third year in laboratory. Professors Shaw and Barreto.

BIOLOGY.

Two years required, may extend through the entire course. Field work in botany; Jaboratory work and comparative studies. Professors Lane, Loefgren and Shaw.

GEOLOGY-PALAEONTOLOGY.

Through the fifth year. Chair vacant. Occasional lectures by outside professionals.

HISTORY AND SOCIOLOGY.

General history required three semesters. French and English history are a part of the respective courses.

Professors Waddell and Sanctos Saraiva.

MENTAL AND MORAL PHILOSOPHY.

Begins at the fourth year and receives the attention given in Union College. Professors Waddell and Carvalhosa.

RHETORIC AND LOGIC.

Two courses, one in English for students preparing for the study of theology, under Professor Waddell; and another in the regular course, under Professor Sanctos Saraiva, and include criticisms and construction.

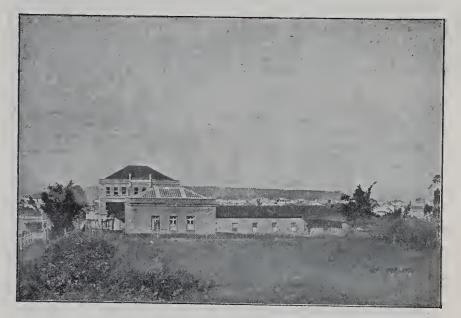
LATIN.

This branch is taught in the preparatory course, in the grammar school, as a basis of the study of early Portuguese. In the College and University course it receives the development only possible in a Latin country. The professor in charge of this branch is the author of a Latino-Portuguese dictionary, an advanced Latin grammar, and is a noted scholar.

GREEK.

Greek is not commenced until the last year (the 3rd) of the Gymnasium, or disciplinary, course. Chassang's Grammar, in French, three books of the Anabasis and one book of the Iliad are read. In the Literary or Classical course the study may be continued as in corres-ponding department of American Colleges. There is a special course for students preparing for the study of theology embracing New Testament Greek. It is dropped in the scientific and engineering courses at end of third year or omitted altogether in Civil Engineering course.

Professors Caperan and Lyon.



Back view of buildings from the Campus.

BIBLE STUDY.

New and Old Testament study is given a very prominent place throughout the course, Old Testament characters, divided monarchies and location of Prophets; Life of Christ. Evidences of Christianity. New Testament studies, etc. The Bible is used as a text-book throughout.

Prof. Rev. Carvalhosa.

LAND SURVEYING.

There is a special course in what is known in Portuguese as "Geographical Engin-eering"-Land Surveying. In second year much field work is done with level and transit. Line Surveying. Determination of Areas. Farm Surveying. Use of Chain. Adjustment of Instruments. Field Practice in Elementary Triangulation. Survey of Plantations. Con-touring and Topographical Surveys, etc., etc. Profs. Waddell and Frick.

At end of second year a certificate of Land Surveyor is given to students who have done all the work of the course in a satisfactory manner.

THE SCIENCES.

Are taught in laboratory and field as practically as possible. There is also a higher commercial course under Professor Carvalhosa.

Only three courses are at present attempted-Scientific, Engineering and Literary. The Engineering course may be completed at end of third year by eliminating Greek alto-gether from the course. The Scientific and Literary courses are completed at end of third year, and students who have done all the work demanded in a satisfactory manner receive. the degree of B. S., B. E. or B. L.

For the Bachelor's degree a student must have preserved a good character record, pass a satisfactory examination in every subject designated in his course and present an acceptable thesis for graduation.

For the Master's degree the applicant must give notice to the Faculty, a year in advance, of his intention to try for the degree, present a printed thesis on an original subject, which, if satisfactory, he will be called upon to discuss before the Faculty, publicly. The de-grees to be granted by Board of Trustees on recommendation of Faculty.

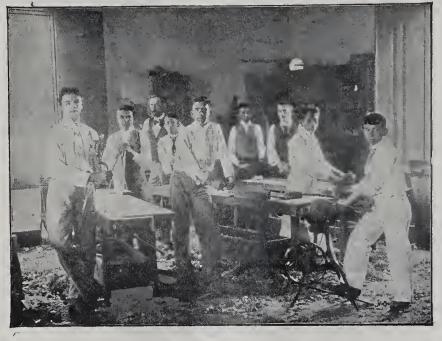
In the future, examinations will be fiscalized and diplomas issued by the Board of Regents.

EXAMINATIONS.

These are held frequently, informally, and are rather of the nature of reviews than a test of knowledge. They are held for the benefit of the pupil or student and are both written and oral. The monthly examination in the secondary course and the quarterly in the college are arranged by the faculty and not by the teachers.

We believe there has been more miscarriage of good intentions, more downright injustice and more unnecessary suffering resulting from the old "*fuals*," on which the fate of the student was made to depend, than from any other of the old erroneous processes. The student is ranked on the work done throughout the year. The "points" honestly

earned are not to be lost through nervousness, worry or home trouble, in a fatal "final.



In the Manual Training Shop.

There is a final examination for the "maturity" certificate and for college graduation, in which opportunity is given to improve, but no failure is permitted to destroy the standing already honestly earned and credited.

A pupil of the secondary school or a student may pass on his record, without the final; or may recover lost ground in the final, which, in such cases, is prolonged and thorough. A high annual average is demanded in all departments to enable the pupil or student to pass. from one grade to another. They must know well the subjects taught, and be able to do the next thing.

GENERAL PLAN OF INSTRUCTION.

In the general scope of work an attempt is made to follow the plan adopted in Union College, modified, however, to suit a Latin people and language. Disciplinary work through study of languages is much more satisfactory among Latin

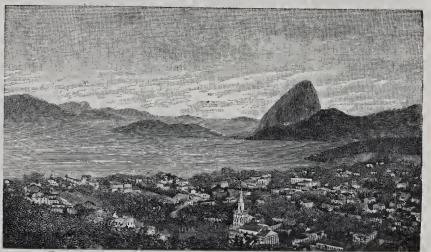
peoples than that obtained through the study of mathematics; modern languages, therefore, dip into the courses of the lower school, in fact, begin with the first primary class and continue all the way through. They awaken early the habit of comparison and make it easy to study well.

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State		



THE PAPAYA TREE (carica papaya).

Commonly called, in English, the Paw-paw, but is not the paw-paw (asimuna) of our southern woods. It is called the Mamão in Portuguese. It grows in all parts of Brazil to a height of eighteen or twenty feet and produces a fruit resembling in size, tex-ture, color and taste a small musk melon. It is eaten with salt and pepper, or sugar, exactly as we eat the musk melon. It also has valuable medicinal properties, *Papaine*, a powerful digestive ferment, being made from it. The leaves have the property of rendering tender the toughest meat, if wrapped in them for a few hours. in them for a few hours.

LATIN AMERICA AS A FIELD FOR UNITED STATES CAPITAL AND ENTERPRISE

BY JOHN BARRETT

DIRECTOR OF THE INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS.

[Reprinted from THE BANKERS' MAGAZINE, June, 1907.]

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BY JOHN BARRETT,* DIRECTOR INTERNATIONAL BUREAU OF AMERICAN REPUBLICS.

I T IS my desire to interest every banker and investor in the United States in the industrial and material development of Latin-America. For American capital it is a great undeveloped field. It has vast potentialitics which are not appreciated. There is no time to be lost. Latin America is on the verge of a forward movement that will astonish the world. Unless American capitalists are up and doing, those of Europe will control the situation and reap the chief benefits.

This is no frightened cry of alarm. It is no despairing shout. It is not a pessimistic wail. On the other hand, it is a simple statement of truth, based on a careful study of Latin America and a diplomatic experience in many of its principal countries covering some six years. I do not ask that heed be given to my story because I tell it, but simply because it narrates facts that any man of common sense, who is familiar with conditions in Latin America, can relate and prove as well as I. Without appearing to lay stress on my personal views, but in order to create confidence in my observations, I would recall that a dozen years ago, when I had the honor to be a United States Minister in Asia, I made similar prophecies in regard to American commercial and material opportunities in the Orient. These were first ridiculed and even scorned by many of the leading American newspapers. Today, the realization is far beyond what was pictured in my most hopeful descriptions. I have studied Latin America, from Mexico and Cuba to Argentina and Chile, no less carefully than I did Asia, from Japan and China to the Philippines and Siam, and I am now convinced of the truth of all my humble conclusions.

PRESENT AND PROSPECTIVE INVESTMENT.

There is no better argument in favor of the importance and value of the Latin-American opportunity than a citation of what is being done today. Mexico, Central America, and Cuba can be passed over with brief references, because they are so much better known in the United States than is South America proper. It is well to remember, however, in passing, that, according to the opinion of Senor Don Enrique C. Creel, the distinguished Ambassador of Mexico in Washington, and a man who stands high both in financial and diplomatic circles of that Government, over seven hundred million dollars (\$700,000,000) of money from the United States are invested throughout his country. This shows how eagerly the capital of the United States will seek Latin nations if peaceful conditions prevail. It is a logical conclusion that if this sum is invested in Mexico, there is room for ten times that amount, or seven billion dellars

^{*}Formerly United States Minister to Siam, Argentina, Panama and Colombia.

(\$7,000,000,000) to be placed in South American countries from Colombia to Chile. Of course, I do not mean that this sum can be put in all at once; but there will be a demand and opportunity for it during the next twenty years if the investors of the United States do not let those of Europe take the best chances first. The other day, a reliable financial paper in Europe made the significant statement that two billion dollars (\$2,000,000,000) of European capital would be invested in South America in various enterprises during the next ten years, and that many of the great financial institutions of Europe were seriously beginning to believe that capital was safer in South America than in the United States. Of this point, in so far as it refers to revolutions, I shall speak pointedly a little later on.

THE CARIBBEAN AND CENTRAL AMERICAN STATES.

In Cuba, already over one hundred and fifty million dollars (\$150,-000,000) of American money are invested. In Puerto Rico, Santo Domingo, Haiti, and the Central American states of Guatemala, Honduras, Salvador, Nicaragua, Costa Rica, and Panama are fifty million dollars (\$50,000,000) more—and yet all experts who have studied these small countries agree that the development of their resources has only begun. They may be in a somewhat disturbed state, but there is a strong sentiment growing among all of them against revolutions and in favor of permanent law and order. Some people describe the present trouble in Central America as the straw which will break the back of the revolutionary camel and inaugurate a new era of peace and prosperity.

OUR NEAREST SOUTH AMERICAN NEIGHBOR.

Now, coming to South America proper, we have a fascinating field of study. Let us first glance at Colombia, our nearest neighbor, and yet perhaps the least known of the countries on the South American Continent. Its Caribbean ports are only 950 miles from Florida. It is much closer to New York, Boston, and Philadelphia than Panama and most of the Central American states. It covers an area as large as Germany and France combined. Possessing a marvelous variety of climate from the temperate cold of the wide plateaus of the Andes to the tropical heat of its lowlands, rich with a remarkable variety of minerals, producing almost every important vegetable and timber growth, and yet in the very infancy of its foreign development and exploitation, it is most tempting for capitalists looking for virgin fields. Although Colombia has had the name of being disturbed with internal strife in the past, it is now, through the wise administration of its President-General Rafael Reyes-gradually sub stituting confidence and quiet for distrust and conflict. General Reves is doing all in his power to interest foreign capital in the exploitation of the resources of Colombia. He wants to build trunk and branch lines of railroads over its wide area; to open up its mines of gold, copper and platinum; to improve the navigation of its many rivers; to carry to market the valuable timber of its primeval forests; to put in electric light and street car lines in its principal cities, and to take advantage of its numerous water powers. When I was recently United States Minister in Bogota, its capital, one of the most conservative representatives of **2** great English banking-house told me that Colombia alone could give profitable investment during the next ten years to twenty-five million dollars (\$25,000,000) of foreign money.

THE RICH LAND OF THE ORINOCO.

Venezuela may seem a little disturbed at times, but those familiar with its interior agree that, in proportion to area, no other South American country has a more extended variety of resources capable of profitable development. One trip up the mighty Orinoco River and its tributaries will convince the most skeptical that millions of dollars are to be made in taking advantage of what nature has given Venezuela in prodigal supply. Like Colombia, it is almost a *terra incognita* to the American capitalist or traveler when he gets beyond the Caribbean coast. With these two republics crossed by trunk lines of railroads, with branches into various valleys and upon their high plateaus, they would enter upon a new era of prosperity hardly contemplated at present.

THE COMMON MISTAKE REGARDING THE TROPICS.

I am here reminded to emphasize the mistake that the average North American makes when he classes countries like Colombia, Venezuela, Ecuador, Peru, and Brazil as purely tropical and therefore dangerous for men of the United States and Europe if they expect to spend much time there. It is altitude above the sea rather than nearness to the equator that determines heat or cold. A man who goes up from the tropical sea level 5,280 feet, or one mile, to a plateau, finds it cooler and more temperate than if he traveled one thousand miles north or south from the equator on the surface of the earth. Again, if he goes up 10,560 feet, or two miles, upon any one of the numerous high plateaus of the Andes, he will find a far more agreeable and equable climate than if he journeyed two thousand five hundred miles north or south from the equatorial line. What does this suggest? Simply that the so-called and much-despised tropical section of South America, having many large and cool areas wonderfully mingled with low tropical valleys, all of which are characterized by exceptional fertility of soil and variety of resources, will experience an astonishing development when capital realizes the opportunity and feels that it is safe.

Ecuador, which looks small on the map, but which is big enough to include within its area five or six Pennsylvanias, is a good illustration of this point. Through its entire length for many hundred miles there are fertile, populous Andean uplands, in the center of which is located its capital, Quito. In a short time a railroad built by an American, Mr. Archer Harman, in the face of great financial and engineering difficulties, will connect Guayaquil, its thriving port on the Pacific, with its capital city, first traversing in this distance the rich tropical lowlands and then climbing up into the mountains. This road, together with one in Colombia, which the Messrs. Mason, Americans also, are building from Buenaventura, on the Pacific coast, into the famous and beautiful Cauca Valley, will form important divisions in the mighty Pan-American Railway system, which is being so strongly advocated by ex-Senator Henry G. Davis, of West Virginia, and Mr. Andrew Carnegie.

THE RICHES AND PROGRESS OF GREAT BRAZIL.

When one speaks or writes of Brazil, he has difficulty in finding adjectives which will describe truthfully the opportunities in that country for legitimate exploitation of North American capital and yct which will not suggest the use of exaggerated phraseology. The simple facts—that Brazil covers a greater area than the United States proper; that out of the Amazon River every day flows three or four times more water than out of the Mississippi; that this gigantic stream is navigable for thousands of miles; that the city of Rio Janeiro, its capital, has now a population of 800,000 and spent more money last year for public improvements than any city of the United States, excepting New York; and that to-day the central government and the different states are expending larger sums for harbor and river improvements than the Government or States of the United States—all convince the most skeptical that Brazil is a field for the investor to study thoroughly and thoughtfully.

Only the other day, it was announced that the celebrated American engineer, Mr. E. L. Corthell, who designed the elaborate dock system at Buenos Aires in the Argentine Republic, had secured a concession for building a great harbor at Rio Grande do Sul, in the south of Brazil, and would expend over fourteen million dollars (\$14,000,000) on the project. Plans for the construction of railways into the heart of the country, including one that will eventually connect Rio Janeiro with Montevideo, the capital of Uruguay, on the south, and with Asuncion, the capital of Paraguay on the southwest, are well under way. The navigation of the upper branches of the Amazon River are to be so improved that there will be connection with Lima, on the Pacific side, and with La Paz, the capital of Bolivia, located in the Central Andean plateau. All over Brazil new towns and cities are springing up which will require water works, electric lights, sewerage systems, and street car lines. Back in the interior, which has heretofore been described as a jungle, are being found mountains of iron and coal and forests of valuable timber, upon which the world must largely draw for its supply in the future.

Over a thousand miles up the Amazon is the thriving city of Manaos, which reminds one of the pushing western cities of the United States. It is now looking forward to a population of 100,000, and prides itself on its fine streets, business buildings, street car service, and handsome opera house. If the traveler will go another 1,000 miles up this great stream, he will arrive at Iquitos, the Atlantic port, as it were, of Peru, a city which is growing with surprising speed, although its neighborhood a few years ago was considered a rendezcous of savages. Without enlarging on the possibilities of Brazil to supply the world's demand for rubber and coffee, so well-known in the United States, it can be said that this Empire Republic of South America offers a field for safe investment of one hundred million dollars (\$100,000,000) of American money in the near future.

AMERICAN CAPITAL BUILDING NEW RAILROADS.

There is hardly space in this article to go into details about Uruguay, Paraguay, Peru, and Bolivia, but a few points must be kept in mind. Chiefly through the influence of the able Minister of Bolivia in Washington, Mr. Ignacio Calderon, nearly fifty million dollars (\$50,000,000) of American capital will be invested in the construction of Bolivian railways, which will result in bringing her limitless mineral resources and their consequent exploitation directly to the attention of the world. In Peru, the greatest mining enterprise is in the hands of Americans, and their consequent exploitation directly to the attention of the world. In Peru, the greatest mining enterprise is in the hands of Americans, and they declare that they have only scratched the surface. The millions that the Haggins have put, and are putting, into the copper deposits of the Peruvian Andes are evidence of their value. Paraguay seems to be tucked away in the interior of South America so that its agricultural and timber wealth are not appreciated, but every consular report that comes from Asuncion shows that the Paraguayans are anxious to encourage the investment of North American money. In Uruguay, we find one of the most fertile soils in all the world; and, as evidence of Uruguay's forward movement, it can be cited that the Government is spending ten million dollars (\$10,000,000) in making the harbor at Montevideo one of the best in all America.

CHILE A SCENE OF GROWING ACTIVITY.

Where to begin or end in a description of Chile's material and industrial possibilities is difficult to decide. That Europe has confidence in its future is proved by the eagerness with which German and English capital is seeking investment along numerous different lines within its limits. Reaching for nearly 2,000 miles along the Pacific coast of South America and having a wide variety of climates, products, and natural resources, it presents an extremely inviting opportunity. Its harbors are being improved, its railroads are being extended, and its cities, especially those injured by earthquakes, reconstructed. The Chilean Government expects to spend at least ten million dollars (\$10,000,000) in making Valparaiso a safe harbor. Mr. Lindon W. Bates, the well-known hydraulic dredging engineer of New York, is about to lay before the Government at Santiago a scheme by which he claims he can construct a safe harbor at Valparaiso at an expense much less than that proposed in the project of European engineers.

THE WONDERLAND OF SOUTH AMERICA.

Last, but undoubtedly far from least, we consider the Argentine Republic, sometimes called the "Wonderland" of South America. Located to the south of the equator not unlike the United States north of it; possessing through its greater portion a temperate climate; covering an area as large as that section of the United States east of the Mississippi River, plus the first ticr of states west of it; drained by the great River Platte system, out of which flows twice as much water each day as out of the Mississippi; and boasting a capital city, Buenos Aires, which has a population of over one million (1,000,000) and is growing faster than any other city on the Western Hemisphere, excepting New York and Chicago, the Argentine Republic says today to capitalists, investors, and bankers of the world that they have no more inviting field for the secure placing of their surplus money. Business "talks," and it speaks loudly and convincingly in regard to the Argentine Republic. There can be no more logical argument in support of Argentina's claim to commercial importance than the fact that in the year 1906 it carried on a foreign trade, exports and imports, amounting, in all, to the magnificent total of five hundred and sixty-two million dollars (\$562,000,000). This, though true, seems almost incredible when we realize that the country has yet only about six million people. Stated in another way, the Argentine Republic, with a comparatively small population, carries on a larger foreign commerce than Japan with forty millions or China with three hundred millions of people. It means that her trade with the rest of the world is nearly \$100 per head, or proportionately greater than any other country of standing on this earth.

The railway systems of this Republic, which connect Buenos Aires with Bolivia on the north, with Chile on the west, and with Patagonia at the southern end of Argentina, rival, in proportion to population, the railroad systems of the United States and European countries. The cities of the interior are growing rapidly and there is everywhere a demand for capital to give these towns modern advantages. The amount of money, required not only to do this but to improve the vast agricultural possibilities of her plains and the mineral wealth of her mountains, should be supplied, in a considerable part, by the United States.

GENERAL OPPORTUNITIES FOR INVESTMENT.

I would add, in reply to the many inquiries which come to the International Bureau of American Republics, that money is wanted all over South America for the establishment of North American banks, or branches thereof, in the principal cities; for the building and extending of railroads; for the construction of electric rail and street car lines, electric lightning plants, water works, sewerage systems; and for financing concessions covering harbor improvements, agriculture, timber, and mineral exploitation, not to mention a score of lesser opportunities that combine to make a general onward movement.

REVOLUTIONS AND ACTUAL COMMERCE.

As for revolutions, I desire to emphasize the fact that capital must not be frightened or misled by the little difficulty in Central America or by occasional unorganized outbreaks in some of the lesser South American countries. The truth is that four-fifths of South America has known no serious revolutions in the last decade and a half, while the present prospects for lasting peace and prosperity are better than ever before.

The query as to what Latin America is doing in its relations with the puter world can be summed up in the gratifying and surprising statement that the total foreign trade, exports and imports, of Latin America in the year 1906 were valued at two billion, thirty-five million, and three hundred and fifty thousand dollars (\$2,035,350,000). Of this amount, exports were one billion, one hundred and thirty-eight million, two hundred and sixty thousand dollars (\$1.138,260,000), and imports, eight hundred and ninety-seven million and ninety-five thousand dollars (\$897,095,000), leaving a remarkable balance in favor of South America of two hundred and forty-one million, one hundred and sixty-five thousand dollars (\$241,165,000).

THE INTERNATIONAL BUREAU AND MR. ROOT'S TOUR.

In conclusion, I wish to take advantage of this opportunity to call the attention of capitalists, investors, bankers, and business men in general to the broadened scope and plan of the International Bureau of the American Republics, which, under the ambitious programme outlined by the Third Pan-American Conference, held at Rio Janeiro, Brazil, last summer, is being reorganized and enlarged so as to become a world-recognized and powerful agency not only for the extension of commerce and trade but for the development of better relations of peace and friendship among all the republics of the Western Hemisphere.

The impetus given to this plan by the extraordinary visit of Mr. Elihu Root, Secretary of State of the United States, to South America, cannot be overestimated. He accomplished more in his three months' journey, by his contact with the Latin-American statesman, by his speeches and by his personality, to remove distrust and to promote mutual good will, confidence and their corollary commerce, than all the diplomatic intercourse and correspondence of the preceding seventy-five years. As a result of Mr. Root's visit to South America, a new era has already dawned in the relations of the United States with her sister nations, and it now remains for the capital of this country, accumulated through our past prosperity and looking for new fields, to improve the wonderful opportunity in the great southern continent.

Report of the

COMMISSION ON LATIN-AMERICA

OF THE

World's Sunday-school Association

Presented at the World's Seventh Sunday-school Convention, Zurich, Switzerland, July 8-15, 1913

The Commission on Latin-America:

Chairman: Mr. ROBERT E. SPEER, New York. Secretary: Rev. HERBERT S. HARRIS, Chicago.

Rev. Carey Bonner, 56 Old Bailey, London, E. C., England. The Rt. Rev. E. F. Every, Buenos Aires, Argentina. The Rt. Rev. Lucien L. Kinsolving, D. D., Rio Grande do Sul, Brazil. Bishop W. R. Lambuth, D. D., 810 Broadway, Nashville, Tennessee. Bishop Homer C. Stuntz, Buenos Aires, Argentina. Rev. Chas. Inwood, F. R. G. S., England. Rev. G. Campbell Morgan, D. D., London, England. Rev. E. J. D. Hercus, M. A., London, England. Rev. John W. Butler, D. D., Gante Street 5, Mexico, D. F. Rev. Arcadio Morales, D. D., Mexico, D. F. Rev. H. C. Tucker, Rio de Janeiro, Brazil. Rev. Alvaro Reis, D. D., Rio de Janeiro, Brazil. Mr. Charles J. Ewald, Montevideo, Uruguay. Rev. Charles W. Drees, D. D., Buenos Aires, Argentina. Rev. J. W. Fleming, D. D., Buenos Aires, Argentina. Rev. Francis G. Penzotti, Buenos Aires, Argentina, Rev. W. B. Boomer, Concepcion, Chile. Rev. Thomas B. Wood, D. D., Lima, Peru.

The Commission Report herein given appears (in part) in "World-Wide Sunday-school Work," the Official Report of the World's Seventh Sunday-school Convention, which contains also similar reports of the Commissions on Continental Europe, South Africa, India, the Orient and Mohammedan Lands. The volume contains 664 pages, with seventy pages of illustrations, and may be had for \$1 from the World's Sunday-school Association (American Section), Metropolitan Tower, New York City. For information as to this and other pamphlet reprints of the Commission Reports, apply to the same address.

Aires, the fourth largest city in the western hemisphere, and the largest city in the world south of the equator, with a population of over a million and a quarter, as great as that of Baltimore, Boston and Denver combined, and embracing one-fifth of the entire population of the country, has a predominantly foreign element, nearly a quarter of its population being Italian. In Brazil the German element numbers approximately one-half a million, and increasingly the southern states of Brazil from Sâo Paulo to the border offer a great opportunity for reaching the European population which stands in urgent need of the friendship and sympathy of the churches of the older lands.

In the progressive section of South America there are 146 ordained foreign missionaries, 714 South American workers, and 40,244 communicant members of the Protestant churches. In the backward nations there are 35 ordained foreign missionaries, 124 South American workers, and 1,073 communicant members of the Protestant churches. In other words, in the progressive section there is one ordained foreign missionary to 235,000 of the population, and in the backward section one to 457,000.

The people of Latin-America have a great national inheritance and they possess many noble qualities of character. Speaking generally, they are warm hearted, courteous, friendly, kindly to children, respectful to religious things, patriotic to the very soul, but their leading men lament the great evils of Latin-American life which must be dealt with.

As we know, only Christianity, making the life of nations clean at the springs, raising up new generations of enlightened pure-hearted children, can deal with these evils efficiently. The official statistics, both of morals and education, reveal these deep needs which weigh so heavily upon the hearts of the best men in Latin-America.

According to the census of Brazil in 1890, 2,603,489, or between one-fifth and one-sixth of the population are returned as illegitimate. In Ecuador Mr. W. E. Curtis says that more than one-half of the population are of illegitimate birth. At one time in Paraguay, after the long war, it was estimated that the percentage of illegitimate births was over 90 per cent. In Venezuela, according to the official statistics for 1906, there were that year 47,606 illegitimate births, or 68.8 per cent. In Chile the general percentage is 33 per cent. and the highest in any department a little over 66 per cent. In England the percentage is 6 per cent., and in France and Belgium, 7 per cent. The deliverances of the Plenary Council of the Latin-American Bishops held in Rome in 1899 bitterly condemned the conditions which they represent as so widespread and deplorable.

The educational needs are likewise great. In Bolivia, out of a total population of school age of approximately 400,000, there were 41,588 in school. In Peru, out of a total of approximately 700,000 there were 100,814 in school. In the United States, out of a school population between five and fourteen years of 16,954,357, there were 10,361,721 in school.

The issue for June 23, 1909, of O Estado de São Paulo, the leading newspaper in São Paulo, contained a letter from a correspondent bemoaning the delinquency of Brazil in the education of her people. In Brazil, he said, only 28 out of each 1,000 of the population were in school; in Paraguay, 47; in Chile, 53; in Uruguay, 79; in Argentina, 96. In the Argentine, out of a population of 6,200,000, 597,203 or 9.632 per cent. were in school. In Brazil, out of 19,910,646 (his figure) only 565,942 or 2.842 per cent. In the United States, 19 per cent. of the entire population are in school; in Germany, over 16 per cent.; in Japan over 12 per cent. In other words, about four times as large a proportion of the American population are in school as of the entire population of South America.

The result in popular illiteracy is just what would inevitably result from such neglect. The facts can be made real to us by home comparison better than in any other way. The average illiteracy in the American nation is ten per cent. and a fraction over. If we include all the children under ten years of age who are out of the school, we have a total illiteracy in the United States of about sixteen per cent. According to the last official census, the proportion of illiteracy in the Republic of Brazil was eighty-five per cent., including children under six years of age.

To realize the breadth of the need of religious education in Latin-America we need to remember also the great Indian populations for which practically no such work has as yet been undertaken. Here and there the Franciscans, Capuchins and Dominicans and others have carried on their work, but anything like Bible teaching is practically unknown among these great Indian populations. How many Indians there may be in South America is open to dispute. The following table gives an estimate which errs, if at all, on the side of excess: Brazil, 1,300,000; Argentina, 30,000; Paraguay, 50,000; Chile, 102,118; Bolivia, 900,000; Peru, 1,700,000; Ecuador, 1,000,000; Colombia, 250,000. There are a few missions working among the Indians in Chaco, in Chile, in Bolivia, and in Peru, but practically nothing is done for the Indians of the Amazon, and what has been begun is woefully inadequate among the large Indian population of Bolivia, Peru and Ecuador.

There are savages among these Indians, but they are not unapproachable. The greater difficulties are due to climate and the geographical inaccessibility of the people and to the moral and spiritual need, but these are precisely the reasons for our going to them. The South American governments have not sought to do much among them, and the rubber trade and their enterprises have despoiled them. Gruesome stories are told of their exploitation in the rubber regions. Work among the Quiehuas and Aymaras is more hopeful than among our North American Indians, and adequate educational and evangelistic work among them would surely effect in a few generations greater improvements than have been wrought among them by the agencies which have controlled them for the past four hundred years.

The South American Indians on the Andean plateau are a patient, saddened, hopeless people. What the London *Times* says of the Peruvian Indians might be said in greater or less measure of all these peoples from Venezuela down through Bolivia:

"The Indians of Peru were never the fine fighters that the Araucanians were, with the wild love of liberty that led the warriors of that race to their greatest deeds; but they certainly produced men of military genius in the days before the Conquest, men who were not mere fighters, but were great 'organizers of victory,' masters of strategy, and, in a word, scientific soldiers of the modern type. Essentially, however, they were a peace-loving people; and so they have remained, patient, remarkably submissive, docile, long-suffering as sheep. To remember their great and noble past, the governing instinct their rulers displayed, and their mighty civilization, and to see them now with their individuality crushed out as the result of their long years of slavery, and suffering a heavy death-rate, owing to acquired intemperance, to poverty, and to the unsanitary conditions in which they live, is the saddest thing in South America."

(The *Times*, London, South American Supplement, August 30, 1910.) This is the great and so inadequately occupied field which this commission has had to consider.

GENERAL CONDITIONS OF SUNDAY-SCHOOL WORK.

We ought doubtless to refer to the general educational work which the various missionary agencies are carrying on in Latin-America, partly that such Bible teaching as these schools give may not be over-

looked, and partly that we may compare the extent of this general educational work with the statistics of the Sunday-school work. Only three institutions of college grade are reported by all the missions in Latin-America, and these three are all in Brazil and report 507 college students. At Edinburgh there were reported 18 theological seminaries and normal schools, with 158 students in South America; 8 such schools in Mexico and Central America, with 66 students; and 4 in Cuba and Porto Rico, with students. In South America there are 31 boarding and high schools, with 3,491 students. It is interesting to note that 25 boarding and high schools in Mexico and Central America report 4,042 students, a larger number than in all of South America. In Cuba and Porto Rico there were 11 boarding and high schools, with 1,179 pupils. In the matter of day schools in all South America there were reported 156 such missionary day schools, with 12,768 In all Latin-America the total number of students in students. colleges and boarding and high and day schools was reported by the various Protestant missions to be 22,222. The total number of Sunday-school scholars, the same year, was 83,248. Compare these figures with Japan, where the total number enrolled in Sunday-schools was 94,496.

If we estimate one-fifth of the population as between the ages of 5 and 14, which the census returns show to be the proper proportion, we shall have 9,500,000 children in Latin-America between these ages. If we should double this number to ascertain the proper Sunday-school constituency of the whole population we should find that less than 1 out of 190 of such possible constituency is actually enrolled in Sunday-schools.

The proportions of children in the Sunday-schools and of scholars over 20 years of age vary greatly in the different fields. In Mexico the proportion over 20 years of age is reported as from ¼ to ½; in Cuba ¼; Argentina ½0, except in M. E. schools of Buenos Aires District (¾); Bolivia ¼; Brazil ⅓ to ½; Chile ½; Colombia ⅔, exc. Barranquilla ⅓; Peru none to ½; Venezuela ⅓ to ½; Santo Domingo ¼1.

Cradle rolls are reported, 2 in Mexico, 4 in Cuba, and 1 in each of the following countries: Porto Rico, Brazil, Chile, Panama, Venezuela and Colombia.

Two home departments are reported in Mexico, 5 in Cuba, and 1 each in Argentina, Brazil and Panama.

Sunday-school conventions are reported: 3 in Mexico, 5 in Cuba, 3 in Porto Rico, 3 in Brazil, 1 in Chile, and 1 in Panama. The questionnaire which the commission addressed to the missionary workers in Latin-America called for information under the following fourteen subjects:

- 1. Statistics.
- 2. Buildings and equipment.
- 3. Grading.
- 4. The Sunday-school session and program.
- 5. The pastor and his work.
- 6. Superintendents.
- 7. Teachers.
- 8. Literature.
- 9. Scholars.
- 10. Homes.
- 11. Public attitude toward the Sunday-school.
- 12. Other religious systems and the Sunday-school.
- 13. Church and Sunday-school.
- 14. Sunday-school support.

The statistical information is presented in the statistical report prepared for the convention of the World's Sunday-school Association. We will content ourselves with summarizing the answers received from the missions in reply to our inquiries under the other headings.

BUILDINGS AND EQUIPMENT

Almost without exception Sunday-school services are reported as being held in church buildings, hired halls and rented houses. The only buildings reported as specially designed for Sunday-school work are two in Buenos Aires, viz.: the Scotch Church (English) and the Barracas Spanish. Also one in Bello Horizonte, Brazil.

In Mexico, Cuba, Porto Rico, Chile and Panama about ½ of the schools separate the primary department in some way; in Buenos Aires and suburbs about ¾; in Brazil, from ½0 to ½0; in Venezuela ½. A much smaller number use blackboards, except in the Province of Santiago, Cuba. The use of libraries is reported about as follows: In Mexico, 1 school in 15; in Cuba, 1 in 6; in Porto Rico, 1 in 7; in Argentina, 1 in 5; in Chile, 1 in 6; in Panama, 1 in 3; in Colombia, none; in Brazil, none, except 1 in 4 in Bello Horizonte and 1 in 10 in North Brazil.

To attract scholars and increase attendance, four correspondents mention prizes, eight visiting, four cross and crown pins, seven picture cards, two public announcement, four personal work, three contests; other things mentioned being invitations, rewards, concerts, social gatherings, picnics, special days, card register, banners and buttons, the Bible, magic lantern, Bible question contest, free day schools, good singing, "Bring others."

The proportion of scholars having Bibles of their own follows: In Brazil, Mexico, Cuba, Porto Rico and Colombia, 50 per cent.; in Peru, 75 per cent.; in Argentina and Chile, 25 per cent.; in Salvador and Guatemala nearly all, also in Santo Domingo; in Bolivia and Ecuador very few.

GRADING

A large number of the schools report three departments; primary, intermediate and adult. A few report four. All except two report the use of the international uniform lessons. Thirteen report kinder-gartens, but only two promotion exercises.

SUNDAY-SCHOOL SESSION AND PROGRAM

The ordinary features are introduced into the programs. The sessions last from one hour to two hours, the majority being of the former duration. Practically no Bible drills are reported. Musical attraction is usually meagre. The only recognitions reported are of birthdays. Christmas is observed throughout Latin-America in the schools, Easter and Children's Day in Mexico, but very little in other countries. Great emphasis is nearly everywhere placed on the use of the Bible in the school. It is used as a book of reference, as textbook, as the only book studied, for the reading of lesson and responses, etc. Memory work is mostly confined to golden texts and memory verses. Those attending regularly are reported as 75 per cent. in Mexico, Cuba and Porto Rico; 80 per cent. in Peru and Venezuela; 70 per cent. in Argentina and Brazil; 35 per cent. in Bolivia and 50 per cent. to 80 per cent. in Colombia. The rewards offered for attendance vary from nothing to books, articles of clothing, picture cards, colored pictures from the wall-rolls and cross and crown pins. (In Brazil these pins do not find favor on account of the use of the emblem of the cross which is not used by Protestants.)

THE PASTOR AND HIS WORK

Of the fourteen theological schools which are mentioned by our correspondents seven teach pedagogy, psychology and Sunday-school management. One has a course of methods of teaching and two require study of a first standard teacher-training course.

The books mentioned as in use in Cuba are: La Legión de Honor, El Reino de Dios en Mantillas, La Organización de la Escuela Dominical, Manual Normal, Pláticas con los Maestros, Problemas y Métodos.

There is no exception to the practice of pastors attending the Sunday-school.

It is the custom for pastors to lead teachers' meetings usually in Mexico, Cuba and Porto Rico, not so generally in Argentina, in Brazil still less so; in Bolivia not at all; in Colombia the pastor helps; in Chile many lead; in Southern California few do. In Salvador a normal class is reported over which the pastor has general oversight. The pastor is reported as largely controlling the Sunday-school in all countries.

The ability of native pastors to read English varies in different countries, e. g., the proportion is given as $\frac{2}{3}$ in Mexico, $\frac{1}{3}$ in Cuba, $\frac{1}{2}$ in Porto Rico, $\frac{1}{6}$ in Argentina, Bolivia none, over $\frac{1}{2}$ in Brazil, very few in Chile, none in Colombia and a majority of Mexican pastors in Southern California.

SUPERINTENDENTS

Two of our correspondents report the training of superintendents by correspondence courses, seven by reading courses and five by summer schools or other schools of methods.

Schools superintended usually by laymen are found in Mexico, Argentina over ½, in Brazil ¾, in Chile ½; usually by pastors or missionaries, in Cuba ¾, Porto Rico 11/12, in Southern California and in Colombia ⅔.

TEACHERS

From 75 per cent. to 100 per cent. of the teachers throughout Latin-America are from the native church membership.

The only countries in which there seems to be any systematic effort to train teachers are Cuba and Mexico. The books used are those given above as used in the theological schools. Association diplomas are given in these countries to those completing the course. Thirty diplomas were given in Cuba last year.

Among agencies used for teacher-training are summer schools, or other gatherings such as an annual conference, an annual convention where lectures are given, the Christian worker's conference for deepening the spiritual life. District Sunday-school institutes, and the annual normal school commencement at which a day is given to the subject of the training of Sunday-school teachers. Work of this kind is very scattered and inadequate, however.

LITERATURE

The lesson helps mentioned as in use are: Expositor Bíblico, Lecciones Bíblicas, Joyas Bíblicas, Aurora, Estandarte Evavgélico, Manzanas de Ora, Faro and Fanal, Peloubets, Westminister Helps, Picture Cards, Local Church papers, Sunday-school quarterlies, Revista de Escola Dominical.

Nineteen of our correspondents think that the denominational periodicals published in Spanish and Portuguese give sufficient space to the interest of the Sunday-school, but thirty-two take a contrary view. Only five think that a larger measure of denominational coöperation in the provision of literature is impossible, also that it is undesirable. but eleven report that such coöperation has already been attained. Eighteen think that the teachers' helps for lesson preparation, which can now be secured, are adequate, but forty-seven record a decided negative to this question. A study of the replies in detail confirms the opinion vigorously presented and generally accepted at the special conference on missions in Latin-America held in New York City on March 12 and 13, 1913, to the effect that one of the greatest needs of the Latin-American field is a better provision of evangelical, especially Sunday-school literature, and that this can only be supplied by a far larger measure of coöperation. Among the most urgent needs in the way of literature, our correspondents have spoken of better mail delivery, good books for teachers, illustrated periodicals for children, a union of papers, better prepared lessons, a paper something like The Sunday-school Times, attractive cards, young people's paper in Spanish, like Forward or Young People's Weekly, graded lessons, Helps for Primary Teachers, Quarterlies, Graded Lesson Helps, Interdenominational Monthly for Teachers on Methods, a good Spanish Sunday-school paper for young people and lesson leaves to be given one week in advance, something in Spanish like Peloubet's Notes. graded lessons in book form for Old and New Testament, good books, charts. etc.

One correspondent points out, however, that the great need is more literate people. Where the conditions of illiteracy are such as we have already described it can be readily understood that there is need not only of more publications, but also, and especially among the lower classes of people, of more men and women and children able to read.

As everywhere in the world, however, the percentage of those who can read among Protestant Christians is vastly in excess of the proportion in any other class of the population. Throughout the mission field the ability to read the Bible is regarded as an indispensable acquirement on the part of Christian converts.

SCHOLARS

Seventeen correspondents report that nothing or little is being done for scholars outside of the Sunday-school hour. Forty-one report home visitation as done by teachers to a greater or less extent. Thirty-seven report social plans, such as picnics; and four or five, athletic games for the boys; and one, week-day singing practice.

Homes

Thirty-five report coöperation with the Sunday-school on the part of parents in Christian homes, such as sending and bringing children, preparation of children, urging attendance, sympathy, read daily portions with children and help to learn lessons, attending themselves.

Twenty-one report "little or no coöperation." Forty-five report that most of the homes from which children come are Christian. Six that half are Christian, and twenty-one that the homes are mostly non-Christian. Cuba and Argentina have the largest percentage of children in the Sunday-schools from non-Christian homes. Among the industrial and social conditions which affect Sunday-school attendance and interest, Sabbath desecration, poverty, men's clubs, and ignorance are mentioned. Twenty-two correspondents state that there is little antagonism on the part of non-Christian homes to the instruction of children in the Bible, while forty-four report existence of antagonism to such instruction springing from the Roman Catholic Church, from indifference, and from ignorance. All the correspondents in Mexico, Argentina and Bolivia who refer to the matter speak of an attitude of antagonism. In Cuba it is not mentioned. Forty-four correspondents report the use of the Sunday-school as a means of entrance to non-Christian homes. Thirteen report that no such use is made of it. Many speak of instances where parents have been won to evangelical Christianity through the Sunday-school. Thirty-two speak of literature taken home by scholars as a means used, and thirty-one of the interest and visits of the teachers. The reports seem to indicate a deficiency in the amount of aggressive effort put forth to bring in the children from non-Christian homes. Those who have made the effort report the methods used to be, invitation, visitation, day schools, personal work, visitation of Bible women, special campaigns, cottage prayer-meetings, etc. Nearly all the correspondents report the homes of the people as accessible. Twenty report home Bible study, and forty-one little or no such study. Twenty report that old wall charts, pictures, etc., are used in the homes and found helpful.

PUBLIC ATTITUDE TOWARD THE SUNDAY-SCHOOL

Twenty-one replies report the attitude of public officials toward the Sunday-school as favorable, sixteen as unfavorable, and thirty-four as indifferent. Nineteen mention public school teachers as opposed to the Sunday-school, and some represent this opposition as successful, but more as unsuccessful. One states that in Mexico City such opposition meets with but little success, but that it has great influence elsewhere in Mexico. One correspondent from Brazil says that indifference is more dangerous than antagonism.

With reference to religious and moral instruction given in the public schools in Latin-America, one correspondent in Salvador goes so far as to report immorality as taught in some schools. Another in Guatamala reports morality as taught from text-books. Others in Mexico state that morality is taught, but not religion, and that all religious instruction in public schools is prohibited by law. Most of the Mexican correspondents, however, report that there is no teaching either of ethics or of religion. Cuban correspondents report "no religion and little moral instruction," and Porto Rican, "no religion, but some ethics." Replies from Argentina say: "The priest has one day a week in some provinces;" "Some teachers try to teach Roman Catholicism;" "No religion, much moral instruction;" "None in most parts;" "In a few cases the priest goes after school hours;" "None." In Brazil our correspondents report, "Nothing special;" "Romish doctrines in many places in spite of laws that prohibit;" "Lives of saints, I am told, and the Roman catechism;" "None, the higher institutions are decidedly antagonistic to morality;" "Catechism;" "Religious instruction is forbidden, but the Roman catechism is taught;" "None whatever." Replies from Chile state that the Roman Catholic religion and catechism are taught in the public schools. In Colombia the public schools are completely in the control of the Roman Catholic Church, and there is teaching of church doctrine, but no Bible. A1though the church has been disestablished in Ecuador, one correspondent reports of the public school, "None but Roman Catholicism." From Peru the answer is given, "Roman Catholic catechism and the need for confession," "Teaching of Roman catechism by priests." In Venezuela, "Philosophy and the catechism are taught;" in San Domingo, Roman Catholicism.

There is no exception to the opinion that such instruction as given is unsatisfactory in shaping moral conduct.

Correspondents in Central America, Mexico, Cuba, Porto Rico, Argentina, Brazil and Chile report that there is need felt and expressed by public officers and educators for religious instruction that shall produce character; a correspondent from Bolivia, however, expresses the view-point of the governing radicals, that morals do not depend upon religion.

OTHER RELIGIOUS SYSTEMS AND THE SUNDAY-SCHOOL

We have sought to find out what the Roman Catholic churches were doing in Latin-America for the religious instruction of children and young people, and have received the following answers: "Nothing besides catechism instruction;" "Doctrine classes;" "Nothing;" "School in connection with hospital;" "Day schools and catechism;" "Confession;" "Nothing except through contact with Protestant effort;" "Feeble effort at Saturday afternoon classes in doctrine;" "Parochial schools;" "Almost nothing;" "So-called Sunday-schools for doctrine;" "Class in church Sunday afternoon;" "Imitating our Sunday-schools;" "Getting children of seven for first communion;" "Preparation for confession and first communion;" "Church and convent schools;" "Teaching prayers to saints and to wear amulets;" "Everything possible from her standpoint;" "Catechism and rival Sunday-schools;" "Forming societies as 'Corazon de Jesus';" "Tracts and literary meetings;" "Societies for the adoration of the virgin."

The attitude of the Roman Catholic Church toward the Bible is stated in nearly all the answers to be hostile. Its reading is prohibited. Qualified answers are as follows: "Indifferent or combatant;" "Seldom allowed to be read;" "Discouraged;" "Its reading is not approved;" "Reading not allowed without special permission;" "Its reading is generally prohibited;" "Attitude, not considered, many times forbidden;" "Its reading is allowed, but it is not encouraged;" "Roman Catholic Church does not know the Bible;" "Its reading is allowed, but discouraged."

Only four or five correspondents report the conduct of Sundayschools by the Roman Catholic Church, and with one exception such attempts are pronounced failures.

As to educational use made of the confessional the answers follow: "Immorality propagated;" "To prejudice against Protestants;" "Intolerance taught;" "Nothing;" "To teach impurity and fanaticism;" "Political;" "To pervert morals and contaminate the innocent."

As to the proportion of people attending the Roman Catholic Church, the answers vary greatly:

Central America says, women and children, and 25 per cent. of men, 30 per cent.

Mexico: 5 per cent. irregularly, probably 40 per cent., 50 per cent. irregularly, 25 per cent., 50 per cent., 50 per cent., 34 of women and 34 of men, small proportion.

Cuba reports: Few, small, about 3 per cent. and 10 per cent. on special days.

Porto Rico: Perhaps 5 per cent., 15 per cent., 2 to 5 per cent. regularly, perhaps 10 per cent., 25 per cent., 5 per cent.

Argentina: 10 per cent., perhaps 40 per cent., 12 per cent., 20 per cent., less of men, 20 per cent. irregularly.

Bolivia: 50 per cent.

Brazil: 15 per cent., perhaps 30 per cent., almost none of the educated, few of the ignorant, 1 per cent. regularly, 10 to 25 per cent., 5 to 10 per cent., 99 per cent. counting those who attend from once a day to once in five years, 90 per cent. irregularly, 75 per cent., 2 to 10 per cent., 33 per cent.

Chile, 10 per cent.; Colombia, Bogota 90 per cent.; Barranquilla, perhaps one in a hundred; Antioquia, 90 per cent.

These estimates vary greatly, partly because the conditions vary in different sections, partly because some of our correspondents have in mind regular church attendance, and others, once a year or on feast days. Nothing impresses the traveler in Latin-America more than the general neglect of attendance upon church services in most places, while in others, especially in those sections where the influence of the Roman Catholic Church is still strong, the churches are crowded to the doors and beyond at all special services.

CHURCH AND SUNDAY-SCHOOL

Testimony indicates that it is usually true that where a Sundayschool is well planted a church follows: Varying percentages of church members and workers come from the Sunday-school, depending much on how long a time the work has been established. Answers run as follows: 50 per cent., 70 per cent., all, 80 per cent., nearly all. One says, church members 10 to 20 per cent.; workers, 90 per cent.

Practically all speak of the great importance of the Sunday-school in relation to the future of the church. Many answer: "Very important;" "Most important;" "Holds first place;" "Yes, I believe that only through the Sunday-school will come the great awakening that this country needs and the spiritual deepening our church members must have."

The possibilities for Sunday-school extension are described as fol-

lows: Slow, Good, Lack of workers, Very great, Unlimited, Great, Open Door, Wherever there are teachers, Great in cities, greater in villages, It is a question of money and workers, Unlimited, Good in villages, Could be quadrupled, Great but need promises and better organization, Fine in cities.

It is evident that the field is great and the need pressing.

A missionary in Porto Rico writes: "There is a tremendous need for Sunday-school work here. Indeed, there is no language that could overestimate it. We must depend upon the children and they must be taught in the Sunday-schools. Besides the Sunday-school does a big work with the older members of the church. There is also a big opportunity. I have found for the most part a willingness on the part of parents to send their children.

"Many who will not attend themselves will send their children. How can you help us? First of all we need more Sunday-school literature in Spanish at a price reasonable enough for our mission schools. This is the great need. We cannot raise money enough to supply the need for good literature that could be and would be read. Again we need some inspirational man to come to us—one who is full of life and enthusiasm. * * * Plan so that we will get a strong man to work up this field and to help us organize the work we have. Give us, then, plenty of good literature. The public schools have made a great opportunity here. The children all read."

Another writes from Argentina: "I consider the Sunday-school the most important part of our work, and when we have some good literature in Spanish and well trained teachers, great things can be expected."

SUNDAY-SCHOOL SUPPORT

Money for the equipment and support of Sunday-schools is usually supplied by schools themselves by means of collections.

Only ten correspondents mention aid for Sunday-school work obtained from their mission boards.

The mission boards make provision pretty generally for the preparation of Sunday-school literature, for the purchase of lesson helps, for the Sunday-schools and for the equipment of the schools. There is a great and general acknowledgment, however, of the lack of adequate facilities for the work, but it is the lack of strong teachers and of the training of such teachers as there are, even more than material facilities, that must be met.

It needs to be remembered that, as already pointed out, the pop-

ulation of South America is scattered over an enormous area, and that in many parts of the field the work is new, the conditions of illiteracy appalling, and the material for Sunday-school work totally lacking, with the exception of the unreached lives needing to be won. A missionary far up in the interior of Brazil writes:

"The work up here is too new to do much in Sunday-school work. The reason is that there are few who can teach, and the work is so scattered that one cannot stay long enough in one place to develop, or even help in a small way, promising men and women for that work. Only some 16 per cent. of the population can read, and the percentage of those who come into our church is not much larger, although many begin to learn as soon as they are converted. We lived in this town some months before we could start a Sunday-school. As a rule people at first are ashamed to be seen coming to our services in the day time, and our evenings are given up to direct evangelistic work. We have tried in different places to start little Sunday-schools, but they have not succeeded on account of the illiteracy of the people and the inexperience of the only available leaders. * * * However, our field is so vast that traveling about three thousand miles a year on mule back I can't cover it, and my visits have to be so far apart and so short that I almost get discouraged. We have to spread ourselves out so far that there is not much left of us by the process. Mv present colleague is going across the States of Coyaz and Matto Grosso to the Bolivian frontier, spending nearly two years on the trip."

Another, who lives in the same state of Brazil, but many days' journey-away from the former, writes:

"This is a mission field principally developed in this century. The portion containing organized work has about 1,500 effective membership enrolled in seventeen so-called churches, with ninety preaching stations scattered over an area greater than California. In the Christian homes the Sabbath is largely given to Bible study, and it is a principal week-day activity in many cases, but regular Sunday-schools are possible only in the larger groups, and in these where the presence of day school teachers or ex-teachers furnishes a leader. In eight of the groups the pastor's visits do not average three per year, and in Bible study and teaching he is examiner and demonstrator only. The public schools outside the capital are worthless, and the believers support thirty day schools in which the Bible is taught daily. When children can read understandingly we give them a bound volume of a child's periodical which contains many Biblical search lessons as a reward; when one repeats the child's catechism perfectly he receives a Bible with maps; when one repeats a certain ten passages, chapters or more, we give him a hymn-book. In 20 per cent. of the membership I gave one year thirty odd of the periodicals and Bibles and twenty hymn-books. A considerable part of these were in families remote from the schools or meeting place."

Where one missionary will have a field as large as the State of Texas it is evident that there is need for reinforcement before there can be a very extensive development of Sunday-school work.

IN GENERAL

The commission asked its correspondents the question, "Do you consider the next ten years strategic for a great Sunday-school advance in view of the trend of sentiment in church and homes, in educational and public circles?" Nearly all the replies urge the importance of an energetic and aggressive development of Sunday-school work during the coming decade. Some reply that the next ten years constitute a problem, that they are not strategic, but important, that the longer the delay the more difficult the work will be, that any ten years are strategic.

As to what constitutes the specially urgent needs in the Latin-American fields, our correspondents reply: "Visits from Sundayschool men of America;" "Better teachers;" "Church union;" "More Spanish literature and teacher-training;" "More Spanish literature and institutes;" "Better coöperation and better preparation of teachers;" "Better organization, teaching and equipment;" "Good secretary located in our midst;" "A leader giving whole time;" "More literature and a live lecturer."

The special emphasis in almost every case is upon literature. One missionary writes:

"What we need for our Sunday-school is literature and only literature. We need a fourteen or more years' Sunday-school course, more or less like the Blakeslee lessons with helps on that plan that can be put into the hands of all our people. It should cover the Bible four times, for primaries, for children who can read, for adolescents, and for adults. It should call for enough Bible reading, study and thought to occupy the three higher groups five hours a week. The helps need not be voluminous but should supplement, connect, clarify and explain what the pupil can get from the text, context and parallel readings. Once prepared the helps would do for a generation, and the future would be prepared by them to do better for itself. We would recast our day school course to supplement and strengthen the Sunday-school work."

Nearly all replies indicate that their writers think that conventions, institutes, model Sunday-schools and class sessions, but especially improved and more ample literature, are the great needs, with occasional visits from well-trained, practical, spiritual Sunday-school men.

Mr. Penzotti, the agent of the American Bible Society, who travels over a good part of the continent, writes of the pitiable inadequacy of the Sunday-school development in some fields and of the special needs which he finds throughout the countries over which he journeys:

"In Paraguay we can say that practically there is almost nothing because of the frequent revolutions. I was there a short time ago and found four Sunday-schools with about 180 children with eight teachers and pastors. In Bolivia we have eight Sunday-schools with 440 scholars, 70 per cent. are children and 30 per cent. grown-ups, with twenty teachers and pastors. Ecuador has seven Sunday-schools with 170 scholars, 65 per cent. are children and 35 per cent. grown-ups, with fifteen teachers and pastors. Experience has taught me that the Sunday-school is an excellent means to prepare and educate the children and often they are the messengers to interest parents and to bring them, with the result that they are often converted. We are in great need of a paper in Spanish with illustrations, anecdotes and with good explanations of the Holy Scriptures. Collections are generally taken up in all Sunday-schools, and doubtless if we had a good, attractive paper, with good material, it would be easy to pay for it. Practically the Sunday-schools in all these countries are mission Sunday-schools and do not own buildings and are very poor in proper literature."

A missionary from Brazil writes:

"There ought to be somewhere in some language a Sunday-school manual, with plain instructions for organizing and carrying on a Sunday-school, with hints on teaching, etc. I have never seen such a work, but it seems to me that it is quite as necessary here in Brazil, at least, as commentaries on the lessons."

Another in Colombia writes: "Can't the World's Association use its influence in getting Mexico to get out its lesson helps way in advance that we may study the International lessons on time."

On the question of the correlation of the work of the Sundayschool with work for young people, our correspondents express a variety of opinions as follows: "Young people to provide teachers;" "Sunday-school and Epworth League unite in conventions;" "Very little except in annual conventions;" "In annual conventions;" Sundayschool is more important than the other;" "By aligning future workers for both;" "In convention work;" "The Y. P. S. is doomed if the modern Sunday-school plans are carried out;" "Members should attend and help;" "Correlation impracticable;" "We hold conventions together, but work through separate organizations;" "Don't tie any weights to the Sunday-schools;" "Union should be much closer;" "Material for Y. P. S. comes in great degree from Sunday-school;" "Has a place all its own, better not try to correlate it;" "All church work ought to be correlated, not combined;" "Here about the same thing, we need more distinction;" "Should be united when such exist;" "Very intimately and successfully, we have about four years' experience in our mission;" "Would work well, I think."

Lastly, we inquired, How, in the judgment of our correspondents, the World's Sunday-school Association could be of assistance in furthering a large advance in the Sunday-school work in Latin-America? The following are some of the replies: "By sending a secretary and finding out conditions;" "Possibly by calling together those interested in a Central American convention;" "By showing the greatness of the movement;" "By providing a general Sunday-school paper with good reading matter for young people;" "By a broader international sympathy, and by attending and helping local work when members of old countries go to non-Christian countries;" "By teaching the unity of Sunday-school interests;" "By giving more literature in Spanish, telling about the work of the world-wide Sunday-school movement;" "Field work and literature;" "By providing funds and securing a secretary who knows the Spanish language and the conditions, religious and social;" "By giving us at least part of the time of an experienced secretary who knows Spanish and Spanish people;" "By giving us information as to successful working methods and how we may hope to overcome our peculiar difficulty;" "Our field would be better served by having less of the Old Testament study and much more of the New, but we do not see how this can be changed until a different plan is made for all Spanish countries;" "Print us some tracts on Sunday-school work;" "By sending a man who is well up in the best Sunday-school methods and is accustomed to addressing children, who will spend a week or so at each center giving practical demonstrations to missionaries and teachers;" "Through aiding in providing literature, teacher-training and leaders;" "By constantly stirring us up, who in the multiplicity of labors abundant sometimes lose sight of the great advantage of Sunday-school work;" "By awakening interest, making known the great opportunity here and helping to secure literature, further a special field secretary for South America;" "The very fact that we are in union will stir us up, we have been hitherto left out-of-doors, we need to be awakened and incited;" "By awakening interest at home in Latin-America."

"The traveling secretary," "Promote the appointment of a field Sunday-school missionary or missionaries (interdenominational) and provide for his support for ten years. Provide for publication of graded Sunday-school lessons and aid periodical Sunday-school issues. Coordinate and inspire Sunday-school workers and work." "By offering a basis of union for coöperation which should result in great stimulus." "By preparing us an adequate literature." "Give us more specialists and literature." "By sustaining a secretary to work in the language of the people."

There are those who do not believe that the field calls as yet for a Sunday-school secretary, but who believe that the great need is for a steady development of local schools, for the creation of more of the units which can later be wrought together into a great organized whole.

Bishop Stuntz, of the Methodist Church in Latin-America, than whom no one is carrying more earnestly the religious needs of Latin-America upon his heart, writes:

"In my opinion the time is not yet ripe for the appointment of a Sunday-school secretary for Spanish-speaking South America. We (i. e., M. E. Church) have the largest body of Sunday-school pupils of any board at work in this field, and yet the total is less than the number in the Sunday-schools of our own denomination in the one city of Los Angeles, Cal. I cannot bring my mind to the conclusion that it is the part of wisdom to expend four or five thousand dollars annually to support a general secretary to look after a work which is so small. Let us have that help to create literature so sorely needed. In five or ten years we may come to the point where large aid could be rendered to the cause by the services of such a worker. Even then it is doubtful if this will be the case. I am full of hope for the work, but it must be greatly developed from within and without the distractions of a 'movement' for another decade if we would have it come to its best."

Another, a missionary living in the State of Minas, Brazil, writes of the need of evangelical day schools before the best Sunday-school work can be done:

"Scattered populations, corruption and superstition as practiced and

taught by Rome, resulting in a wave of indifference, materialism and spiritualism on the part of the majority of the better classes of people, and ignorance and superstition on the part of the lower classes, do not favor the rapid growth of Sunday-school work in this section of Brazil. The principal hope is, I believe, in evangelical schools; there pupils are taught the Bible without interference from without; attendance at church and Sunday-school is required and young people's societies are maintained. By this gradual method public opinion will, in time, recognize the claims of true religion and moral worth. Then we may hope for big things in Sunday-school extension, for by that time we will have more railroads, more villages and towns and better facilities in every way."

We have already referred to the large and increasing body of foreign immigrants in Latin-America. It needs to be remembered that many of these come from the Protestant churches of Europe.

Mr. Bickerstaph writes of the challenge which the large German Lutheran population in Southern Brazil presents to the Zurich Convention at the same time that he refers to what are evidently the central problems of Sunday-school work in Latin-America, namely, literature and competent teachers:

"The more I study the literature sent me by the World's Sundayschool Association the more I am convinced of the great opportunities here in Brazil. Now that we are preparing for Christmas I find that we have nearly 100 names on the Sunday-school roll, while the usual attendance is from 35 to 45. There are 20,000 intelligent Protestants (Lutherans and United) in Parana and Santa Catharina without a Sunday-school. I think that is a challenge to the Zurich convention. I cannot help thinking of these Germans; they would be a mighty help to the evangelization of the Brazilians if they were instructed in the Bible and imbued with the missionary spirit. Would it be at all possible to get money somewhere to send a Lutheran pastor to Zurich? If we could get him enthused he might, on his return, travel about the two States and found Sunday-schools. I can think of nothing more likely to arouse the Brazilian German Church; and if it was once aroused it would give a different color to Protestantism as understood here. It would greatly stimulate our own church. Catechism and Bible history are taught in the German schools, nearly all the pastors being teachers, and there are also special confirmation classes. But all this is looked upon as something pertaining to the school, and to school days, and I think very few German Brazilians study the Bible at all after confirmation.

"What we need in our Sunday-schools are more workers and more literature. We ought to have weekly illustrated papers, with attractive short stories illustrating the lesson topic and putting it within the reach of all children who can read; and then there should be a monthly, something like the *Westminster*, for teachers. Then there ought to be some sort of Sunday-school manual in Portuguese, pointing out the necessity for and great value of the Sunday-school, giving plain directions for organizing and carrying on the same, with hints on teaching and blackboard work.

"We need more workers, and I want someone to tell me how to get the laymen to work in Sunday-school and prayer-meeting."

We cannot close our report without referring also to the unique claims which Latin-America has upon the evangelical churches for a knowledge of the Bible.

The South American religion is the one religion in the world which has no sacred book for the people. In China the great ambition of the whole nation for centuries has been to master the classics. In Moslem lands the Koran is the most exalted of all books and the ideal of the educated man has been to be able to read it in Arabic in its miraculous purity. Hindus and Buddhists have had their sacred books open to all who would study them. But in South America we have had the phenomenon of a land in the complete control of a church which has, as far as it could, sealed its sacred Scriptures to the people. There are Roman Catholic translations of the Bible both in Spanish and in Portuguese, but the church has discouraged or forbidden their use. Again and again priests have burned the Bibles sold by colporteurs or missionaries, even when they were the Roman Catholic versions. Again and again they have denounced the missionaries for circulating the Scriptures and have driven them out of villages, where they were so employed, and have even secured their arrest. It is safe to say that not one Roman Catholic out of a thousand in South America would ever have seen a Bible but for the Protestant missionary movement. The priests themselves are ignorant of it. In only one church did we find a copy of it, though there were service books by the dozen. And in that one church it had apparently been confiscated in the confessional.

The Bible is not read in the Roman Catholic Churches, and there are no Bible schools for its study. The Protestant missionary effort, however, has scattered millions of Bibles over South America and not only brought the book with its vivifying power to the people, but actually forced the South American Church to take up a different attitude. El Chileno, a clerical paper much read by the laboring class in Chile, and El Mercurio, the leading Chilean newspaper, now print portions of the Scriptures daily with Roman Catholic notes upon them. The Roman Catholic Church in Brazil has also modified its position to meet the situation created by the Protestant circulation of a book approved by the church and yet forbidden by it.

Mr. Tucker, the agent of the American Bible Society in Brazil, wrote in 1908:

"In the beginning of our work in Brazil we had to face constantly the fact that the Catholic Church positively prohibited the people from reading the Scriptures and threatened with excommunication any who dared to do so. Even the priests in former years had to ask for a special dispensation if they wished to read and study the Bible for a time. I have visited many priests who did not have a copy of the Bible, and the few that do exist are in Latin.

"We have before reported that the first Catholic Congress, which met a few years ago, in the city of Bahia, discussed the question as to what should be done, seeing that their prohibitions, excommunications, persecutions and Bible-burnings, had not availed to put a stop to the Protestant circulation of the Scriptures, which is all the time increasing. The Franciscan monks were authorized to revise and print the Figueredo translation of the four Gospels. * * * Later appeared a Harmony of the Gospels, the work of one of the most cultured priests in Brazil. * * *

"Early in the present year a priest of the Mission in the College of the Immaculate Conception at Rio de Janeiro completed his translation of the four Gospels from the Vulgate. These he has printed and placed on sale, together with Sarmento's translation of Carriere's French paraphrase of the Acts of the Apostles."

The Archbishop of Rio, who is now a Cardinal, the first in South America, writes a preface commending this work. But in spite of these facts, the circulation of the Bible is still discouraged or prohibited by the South American system and no effort is made in Brazil by the Roman Catholic Church to act upon the commendation of the Cardinal.

The Council of Latin-American bishops in Rome in 1899 particularly condemned the Protestant vernacular version of the Bible, published by the Bible societies. The Archbishop of Bogota in his circular issued in 1909, already quoted, declared that all who received or had in their possession "Bibles or books of whatever kind which are sold or distributed by Protestant missionaries or their agents or by other booksellers are absolutely obliged to deliver such books to their parish priest or to surrender them to the ecclesiastical tribunal of the Archbishopric." His people could not retain copies even of the Roman Catholic versions of the Scriptures which are often distributed by the missionaries. Only a few months ago, the priest in the church on a main plaza in Chile, where the great markets are held, boasted openly in church of having burned seven Bibles.

The circulation of the Bible in South America is still dependent upon the Bible societies and the Protestant missionaries. If it were not for them, the people of South America would to-day be without the Bible.

It is the supreme mission of the Sunday-school to spread the knowledge of this life-giving book among the 70,000,000 peoples of Latin-America, whose needs the English Bishop of Argentina has set forth in appealing words:

"The needs of South America, how great and pathetic they are! The world's empty continent-the hope of the future-the home to be of millions of Europeans, who are already beginning to flow there in a steady stream-it is without true religion, and does not realize its danger! The form of the faith prevalent is the weakest and most corrupt known, and it is impossible to believe that the rising young nationalities of the Continent can long be content with it. Indeed they are not content with it now. Yet a faith they must have. What hope is there for Argentina, for example, that Spanish-speaking United States of the future, without true religion? Of what use are vast material resources, rapid development, wealth, knowledge, power, with-Surely God has a place in the world for these brilliant out that? Southern races. They are still full of vitality. We have no right to speak of them as effete and played out, especially when we know the marvelous recuperative power of the human race. Well, where should this place of development be but in the free air and temperate climate and wide spaces of the new world, far from the social tyrannies and religious superstitions which have hitherto retarded their proper growth? It is nothing less than axiomatic that South America needs true religion, if its future history is not to be a disappointment and its development a failure.

"South America needs what Christian England, if the Church were but moved with more faith and love, could easily give, true religion, viz., Reformed, Scriptural, Apostolic Christianity. Our own people need it, that they may be saved from only too possible degradation. The Spanish and Portuguese-speaking people need it, that they may develop into the strong free nations they desire to be. The aboriginal races of Indians need it, that they may be saved from extinction and find their place, too, in the Kingdom of God."

FINDINGS OF THE COMMISSION

1. We find that there is need of a careful and continued study of the Latin-American field, and of the necessities and opportunities which it presents for the development of Sunday-school work. The World's Sunday-school Association should conduct such a careful and continuous study of the field.

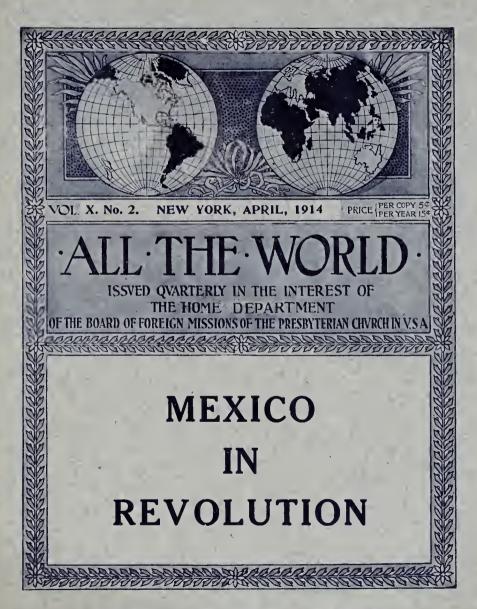
2. We find that the missionaries and Sunday-school workers in this field are anxious for assistance and helpful suggestion. The Sundayschool work in many sections is so undeveloped as yet and the evangelical churches so few in number as compared with other fields that the primary need is not so much for national or continental organization and supervision as for steady local missionary work, but with an ever increasing emphasis on thorough and practical methods applied to religious education in the Sunday-school. The commission would also recommend the development of local organizations for promoting the efficiency of Sunday-school work in those centers or countries where evangelical work is sufficiently well established to indicate the need of organization and to insure beneficial results from the application of such progressive measures. Churches and church members are the great need and our great effort should be put forth to strengthen the missionary agencies at work in Latin-America that strong evangelical churches may be built up all over the continent.

3. We find that perhaps the greatest need next to the need of more churches and evangelical believers competent to teach Sunday-schools is the need of suitable literature in the way of lesson helps, periodicals, and evangelical books.

4. We find a great desire and a great need for coöperation. In the Sunday-school field this desire and need relate chiefly to the provision of suitable Sunday-school literature, although in some parts of the field there is need also of coöperation in institutes and conferences. The World's Sunday-school Association and the missionary boards at work in Latin-America should confer as to practicable measures for providing coöperatively in Spanish and Portuguese the literature so urgently required.

5. There is no greater missionary agency in Latin-America than the Bible, and no greater need than the circulation and study of it. We should give our help to all the agencies which are promoting the publication and distribution of the Scriptures in Latin-America.

6. We find a deep desire throughout all the Latin-American lands for a larger measure of intelligence and interest in their work on the part of the home church. In Sunday-school gatherings and literature at home, and in church papers and missionary publications of the home churches we should do everything in our power to secure a larger presentation of the religious needs of Latin-America and the opportunity and demand for the enlargement of the work which will bring to the people of these great countries the blessings which those nations enjoy which possess an open Bible, and build their public education and their national life on its precepts.



Entered at the Post Office, New York, as second-class Mall Matter.

The first official act of the General Assembly, looking to active participation in the work of foreign missions, was taken in 1817, when it united with the Reformed Dutch Church and the Associated Reformed Church in organizing "The United Foreign Missions Society" whose object was—

"To spread the Gospel among the Indians of North America, THE INHABITANTS OF MEXICO, of South America and other portions of the Heathen and Anti-Christian world."

"ALL THE WORLD"

Price, per Copy, 5c.

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The Missionary Under Fire

F OR an entire year the missionaries of the Board in Mexico have been under fire. This is true in a figurative sense, and in some cases in a literal sense. Two of the missionaries at Zitacuaro were there when the town was taken by the rebels, and the missionaries were exposed to the fire of the combatants and were forced to pay indemnity to the invaders. We would call special attention to the account given in this number, of ALL THE WORLD of a visit to the rebel camp by one of the missionaries in order to rescue an elder of the church who had been captured, and for whose release the captors demanded a large ransom.

The church at home should realize the strain and stress under which the missionaries have labored and the splendid qualities of mind and heart exhibited.

A resident of Mexico City during the past year, and who is intimately acquainted with leading men in the city, gives a graphic picture of the situation:

November, 1913.

Well, one more crisis has passed, and we are still on our legs. The rumors and movements from the 10th to the 17th inst. came nearer scaring me than anything has yet. On Sunday I was pretty nearly sure that I should send my family to Vera Cruz on Monday night, and to Florida by the first Ward liner I could get space in, but I decided to go to headquarters first, and was told at the embassy that while the situation as a whole did not look well there was no need of precipitate action. So I didn't. Of course I am now very glad. Sending out the family and living in two places at once is a very expensive business.

My wife arrived in Vera Cruz from New York just as things began to look squally again. The day that she should have reached port (the Seguranca was a day late) the *Rhode Island* moved from outside the harbor in and moored stem and stern between San Juan de Ulua and the terminal wharf. Her position practically took Vera Cruz and the head of the railroad. It was a heart-in-the-mouth moment when she came slowly gliding in, in the most absolute silence, but with the broadside guns swinging to cover various important points as her position changed. The crowd that watched was as silent as death, but you could feel the tension, even if you were an unsensitive Saxon.

We had a fine bunch of rumors that night in Vera Cruz, you may believe. Mr. Lind had just gone to Mexico, and most of the people staying near the ships to avoid trouble were, naturally, full of alarming inferences as to what it all meant. Some people who came in with' my wife haven't got up to the city yet. We came up at once, but late in the week the rumors became so insistent, and so indefinite, and people who had insiders at Washington or at Vera Cruz primed to fire telegrams at them when the moment of intervention was at hand got so many that I thought something might really be coming. There was a big rush to Vera Cruz from Thursday, the 14th, to Monday, the 17th. Even some of the high-fire-test people sent their families out. This last scare cut our congregation just about 25 per cent. Now the tide is this way again, very strong. Vera Cruz is hot and expensive and uncomfortable, and people are coming back so fast the Pullmans can't accommodate them I await the effect of this on our church. In every such movement hitherto there has been a considerable percentage of permanent loss.

Our average now in church is about half what it was at our very best, in late January and early February, 1912, before Orozco rebelled against the Madero government.

The colony is very much decreased. The same sort of people that estimated 8,000 Americans when I came here are saying, "only 300 Americans left in the city," but I'm convinced both these estimates are wrong. There never were 8,000, and there are still a lot more than 300. I think there are probably at least 200 men, if not 300, besides women and children.

The spirit of our people continues splendid. They certainly are a fine lot to be with. By the way, our Presbyterian missionaries have stood the stick-test berter than anybody else. Not one of our men has gone.

The situation of the government here is curious. It is announcing complete conquest of the rebels by January I, 1914, and I declare I don't see how it can live till then. We average at least one cabinet change a week. I was at the opening session of the Chamber of Deputies, having secured a pass through a Scotchman in the congregation who has dealings with the War Department. It would have been a very impressive scene if one had known nothing more than one saw. The deputies are a better looking lot, on the whole, than the last. They were selected, not elected, and have many military men, colonels and generals. among them. They and the galleries cheered General

Huerta tremendously when he entered. All the diplomats, so far as I know, were present except from our embassy. If one hadn't known that both the floor and the galleries held no one except selected friends of the administration (except in the case of a few foreigners like myself) and that the crowd in the street had been ominously silent as the president passed between unbroken lines of troops to the chamber, one might have thought he was a tremendously popular man. He is, as a matter of fact, a man of strong will, great independence of character, great personal courage and great persistence. These facts should not be overlooked because he disregards, abrogates and violates the law, has men put to death without trial, imprisons deputies and generally acts like a mediaval sultan. He is not good, but he emphatically is not weak.

He is well hated, of course, by many Mexicans. The "leva," or forced levy for the army, is being pushed fiercely, not by conscription, draft, or any open method, but by simply gathering up groups of men on any or no pretext and putting them into the army. Work and money are terribly hard to get and food prices are high. A new tax goes into effect every few weeks. The poor people, the masses, are very bitter. Were they not so cowed by generations of oppression and by the fearful slaughter made among them last February I should expect a rising. I could give lots of "leva" stories which would be funny if they were not so sad.

Well, as I said at first, we are still on our legs. We are still, by what seems a special Providence, even on our financial legs, though I don't know how long we can continue to be. We are well and happy, thank God.



HOME OF A TEACHER IN MEXICO CITY GIRLS' SCHOOL.

Later-The people are very happy over the way the church has kept its feet, and we are getting. I find, a reputation for it. This will help us if things are ever peaceful in the "Republic" again. The immediate crisis here at present is neither military nor political. but financial. That which we have all felt threatening ever since I came seems to be actually upon us. As vou probably know, Gen. Huerta, on December 21. decreed a period of ten days in which the banks need meet no obligations; at the expiration of the period he extended it fifteen days further. Most of the banks have taken no advantage of this, but one of the two biggest, that of Londres v Mexico, has allowed depositors to draw only \$200 a day, and changed this last Monday to \$200 a week. To-day the President declared all bills legal tender. Silver is disappearing from circulation very rapidly, going out of the country and into the family mattress. Mexican gold never was circulated much, but it is now being bought up at a premium of about 12 per cent, less for speculation than as preparation for the evil day. I shall probably try to get some myself. The banks are refusing to accept checks on each other except for collection. The lack of confidence is complete and universal, and we all feel that there is much worse before us. The lack of small money of all kinds is very much felt indeed. It is hard to shop, on account of the reluctance or refusal to give change, which is, of course, greatly curtailing the amount of business done. Curiously enough, what I believe we are learning from this is, not to worry. In every phase of life here at present we can see only just ahead, and must walk by faith, not by sight. And our faith is in the unknown future, humanly speaking. No one I know whose opinion is worth considering sees the faintest ray of light. There is nothing

on the horizon whose approach or arrival would benefit us; no break in the clouds, no star in our night. I do not believe that Gen. Huerta's government can overcome the Carrancistas to the point of suppressing them. Nor do I believe that they can upset him. If he falls it will be the lack of credit, caused by non-recognition, that does it. But if he falls, it will be "after him the deluge". Carranza has absolutely demonstrated an inability to control his lieutenants and minor leaders, conspicuously Villa; and these latter have demonstrated that their ideas of right and wrong, international obligations, meum et tuum, truth and falsehood, authority and responsibility, the value of human life and of the spoken or written word are simply, as one might expect, those of the ordinary lowclass, illiterate or nearly so, Mexican laborer, suddenly become a "general" by virtue of a little more than the average energy and intelligence. What we can expect from them let Chihuahua, Durango and Torreon testify.

The Mexican Christian Under Fire

T HE native pastor in charge of the work at Gomez Palacio was obliged to leave the place when the Federals took possession. His wife, writing to one of the missionaries under date of Feb. 13th, 1914, says:

"I want to write you although it may be but a few lines to let you know that we are well in spite of so many interruptions. My husband is not here. It was necessary for him to leave and he left in the direction of Durango. The church is getting along well. We have meetings Sundays in the mornings, in the afternoon I go to Lerdo. We have another meeting here on Wednesday in the afternoon. We do not meet at night, as the stores close very early and there are no people on the streets; we are afraid to go out. Only the government officials and employees go out. I am very much pleased with the spirit of the meeting—there are no men, about all have left, but we women are holding firm our banner and we are close to God. Our meetings are very spiritual."

"Another native helper, in Torreon, writes", says the missionary, "that a number of his people have left. He is holding his work together with those who remain though he is almost single-handed. He is now in a very difficult situation, as his wife is threatened with tuberculosis and he must get her to a climate more propitious than Torreon."

"From San Pedro in the same district, a student writes: 'Self-support has been better: during the last three months it was \$20 a month. The past year we made the following improvements: Painted the benches, installed electric light, painted inside and out the chapel, as well as making some small repairs on the pastor's residence.' This student is to return to the Seminary at Coyoacan and the church is offering \$25 a month for self-support so that a pastor be sent to them."

The pastor at Fresnillo recently lost his wife. Some days after his wife's mother died. He says regarding the funeral:

"We had arranged the service for 3:30 P. M., but a little after 12, there was great alarm throughout the city as the revolutionists were approaching. This determined me to abandon the idea of the funeral service and to take the body right away to the grave yard. We were just ready to start when there was cannon fire from the outpost of the city guard right near the grave yard and we had to wait, thinking that the fight would go on. But fortunately the revolutionists retired, and we could go out and take the body to the grave yard at top speed, as we did not know what minute the revolutionists would return and make a formal attack. We buried her and ran back to the house."

This same pastor writes: "The brethren here in spite of the very bad situation have not failed to give me what they have promised for self-support. As the Mission only increased my salary \$2.50 the brethren here increased the other \$2.50."

A native pastor sends the following comments on the work in Torreon:

"With the exception of one Thursday and one Sunday during the Ten Days' Battles, I have celebrated all the church services; and notwithstanding the constant alarms and the calamities that some of the brethren have suffered who live in the danger zone we have had good attendance on the services; another disadvantage we had to contend with was the fact that we were without street cars for more than a month. During all this time I have preached sermons on faithful trust in our gracious heavenly Father. From the pulpit as well as in my pastoral visits I have encouraged the brethren with the promises of the Bible. With the help of God everything has contributed to sustain the church as formerly and to give to it the same fervor and enthusiasm. Thanks be to God!

"Notwithstanding the lack of work and the increase in the cost of necessary articles, the church members have given to the support of the church, although less than formerly, owing to the actual conditions, and yet it has been sufficient to pay my salary as well as the necessary expenses of the church.

"Knowing as you do my interest in the education of the young you will not be surprised at what I am

about to write. A few months ago I went to visit three young men, members of the church, in the place where they worked. I saw that it was not a suitable place for them, and so at the first opportunnity I told them it was not good for them to work there, as it would have a bad influence upon them spiritually. As they told me they could not take my advice because they knew no other way of making a living, I resolved to form a class for them to give them a business training; having the class meet from 6 to 7 in the morning, and without any cost to them. Very soon this became known and new young men joined until today there are 48 on the list. Among these pupils I have Presbyterians, Methodists, Baptists, Independents and Roman I have formed four courses and now Catholics. have helping me three young men, the ones with whom I started. They receive no remuneration, because we must all comply with the words of the Lord, 'Freely ye have received, freely give.' Although a number of them live in the center of town they have attended with great regularity and with much profit. God is blessing us richly in these classes, first because some of the young men and women that did not belong to the church now are attending our services, and also for that which I will tell you right now.

"Some time ago while talking with a rich man about these classes and my interest in teaching the young people and children, by the help of God, he became interested to such an extent that he offered to give half a block of land to build a school for girls. As this was no small offer and as I wished to arrange for it in a decent and orderly manner I have taken the necessary steps to secure the transfer of the property and to collect the necessary funds. Another man is anxious for us to start at his country place an industrial school for boys. I believe that God will help us in this important and necessary work, and that the mission may also aid us.

"I have thought a great deal about the state of affairs in this country and have been convinced of our duty as Christians to prepare the next generation with a lasting knowledge based upon the fear of God, for the results of the clerical schools are proving fatal. God will bless us in this work which will redound to the glory of His holy cause and the glory and honor of His holy name."

In commenting on the situation the missionary adds:

"There has been much excitement here in Mexico City over the killing of Mr. Benton in Cuidad Juarez. Naturally the papers here would make much of it, as it discredits the revolution. There are crimes on all sides and the people are suffering the oppression of this government as few realize. The seizing of men for the army is one of the greatest outrages. On my way to the Press in the mornings I have noticed a hungry looking woman with a blind baby selling papers. I have been giving her my paper to resell. Yesterday she did not have the blind baby, but another child. I stopped and asked her about the blind baby and she said that she had five childrenthat her husband had ; been impressed into the army and she did not even know where he was; that she was out selling papers to support her children.

"When you think of a crime against humanity and leave out the nationality, one is not worse than the other. People in the States should not think because Villa is a murderer that the man he is fighting against is a saint. His crimes should be taken into account also." The Thrilling Experiences at Zitacuaro

THE year at Zitacuaro was at no time dull or monotonous for want of something happening. The trouble was that there was too much of it. We quote from a report by one of the missionaries:

"We just happened to get away from the city one week before the 'Decena Tragica' took place. Yet it seemed as if we had jumped from one frying pan into another. During that tragic event in the city rumors in Zitacuaro were flying broadcast about intervention. Several times we had packed our necessary things to leave at night time for the mountain congregations, where we thought we might be safer. It was impossible to get mail or news by wire. Everybody was excited and at times the Mexican feeling against the Americans was not very pleasant.

"Everybody expected a visit from the rebels, but Zitacuaro had to wait until July. We were awakened on Monday morning, July 21, by the sound of firing, which very shortly increased in intensity. As soon as we got dressed I looked out of the windows and saw the Federal soldiers of the garrison on the defensive posted in the doorways of the houses across the street from us, and at the same time, on account of the firing, realized that our own doorway was also occupied by some of the same force. The rebels were making an attack in force, and had been able to surprise the garrison to such an extent that they (the rebels) were already at daybreak in possession of the houses at the north side of the city. At once my wife, the children and the servants went down into the cellar where the stone walls would give them protection. The man servant and I stayed up on the inner corridor in order to better keep in touch with the progress of

affairs. He soon got so scared that he began to beg me to let him go to his family, who are living on the far side of the city away from the firing. After a little I let him out of the house on the south side and told him to make his way home by the side streets, for the main streets were being swept by mauser bullets. The attackers seemed to have very quickly got in possession of the main thoroughfares of the city and were fighting from inside of the houses. From where I was walking back and forth in the house I could see the defenders on the other side of the street. Soon the two just in front were wounded, but were able to escape leaving a trail of blood behind them. Then the one at the corner across from the church was wounded and was taken into the adjoining house. Within a few minutes one of the two who were fighting from the church steps received a mortal wound, from which he died shortly afterward. We could very plainly hear his groans until they ceased. His companion, finding all escape cut off, broke in the lower panel of the church door, crawled in and from there made his way into the house and confronting me with gun in hand demanded clothes with which to disguise himself. I gave him a hat, pants and shirt, which he quickly made use of, and running back into another part of the property disposed of his own clothing so as not to be discovered. While this was taking place in the interior of the Mission House the rebels had secured control of the city and were running across the main square on the south side of our property to capture the barracks within half a square of us. With the exception of the hill on the east of the city, which was held by the Federals until about 10 o'clock, the fighting was all over by 8 o'clock. Our house was in the center of some of the heaviest fighting. At least

fifty shots struck the center of the building, chipped out pieces and passed on their way. On the north side of our front door there are twenty bullet marks within a space of five feet square. During the fighting, as I was looking out of the windows on two occasions, bullets struck the wall near enough to the window so that pieces of plaster were thrown past within a few feet. However, on account of the thickness of the walls and the fact that the missiles struck at an angle, none of them penetrated into the house.

"Of the Federal garrison of 200, 25 were killed, many wounded and the balance dispersed. Among the killed were two officers. The Jefe Politico and the commander of the garrison got away. The rebel loss was two killed and two wounded. Also four of their horses were killed.

"After the fighting had ceased we opened our doors, in order to show them that the house was occupied. The custom of the rebels in other places has been to respect the house which is occupied, but to sack those which are found abandoned by their owners.

"The first thing they did was to hunt for horses. Within a very short time they had taken the horses from the hotel across the street from our house. I was standing in our doorway when they were taken, and was thinking how long it would be before ours would share the same fate. I did not have long to wait, for soon a man came up to me and very courteously said: 'I understand that you have horses. If you were a Mexican I would take them without asking, but since you are a foreigner I want you to give them to me.' I answered that we had horses, and that I would go with him to where they were. As we were going along the street I told him he could take his choice, but that I would ask him as a favor that he

would use his influence to save us the balance. He said that he would do what he could. I got my associate and we two went with the rebel, who was an officer of the 'Coahuila Carbineers,' who had revolted from the Government four months ago. He chose our best horse, that we had paid \$100 for last February, and left a little dark bay horse in its place. I thought that we had thus saved our other animals, but within a few moments another man went to the stables and took the balance, leaving in their place a small horse with a sore back. We learned later that our mule had been able to escape them, and had run away. This proved to be true, as our 'mozo' found him this morning among the mountains to the south of here near the ranch where we had bought him. They also took all our saddles, saddle cloths, bridles, halters and ropes that we had with our itinerating outfit. Not a thing was saved except the pack for the mule. The only satisfaction that we have is that, perhaps, our animals will get good care, for when they rode away on Tuesday evening their commander-in-chief was riding my horse, one of his immediate subordinates was mounted on another, and I was told that a colonel had our other horses, though I did not see him. Hence our horses are in the hands of officers.

"Everything was quiet on Monday night, as they had excellent discipline in their army. Their number was 1,200. On Tuesday morning they began the work of securing money from the citizens. A list was made out containing the names and the amount that they requested from each. We were eating our lunch at midday when a knock was heard on the door, and upon going out to answer it I found five well-armed soldiers, who showed me their list and asked me for \$100. I had only \$50 in the house, which I offered

to them and asked them to come back later for the balance. But they said no, they would not leave me until I gave them the balance. So I got my hat and went out, under their escort, and got the other \$50. I assure you that it is far from pleasant to walk the street under guard of armed men, even though nothing further happen. They let me go as soon as they got the money and told me that later I should go to their headquarters to get the receipt for it. I went about three o'clock and I assure you from what I saw there I was glad that I had paid in the money as soon as it was asked. They had demanded \$1,000 from one of the merchants and he had tried putting them off on several different pretexts. Shortly after I had got into the room a man came in with a large bundle of money, which he put on the table in front of the rebel chief, who, turning to him said: 'Who sent this?' The answer was: 'Salomon ----.' Then followed the following conversation: 'How much is there?' '\$1,000.' Well, now I demand \$2,000, because of the trouble that he has caused me. Where is his representative?' A lawyer stepped forward and said: 'Here I am. sir.' 'Well, tell Mr. ---- that the other \$1,000 must come immediately. If it is not here at once I shall demand \$3,000, and if that is not paid I shall order his house blown up with dynamite.' Then turning to an officer at his side, he said : 'Take three men with you, go with this gentleman and bring that other \$1,000.' A few moments later the wealthiest man of this neighborhood came in under the escort of of four soldiers. The rebel leader turned to him and said: 'Mr. ----, you did not come when I sent for you, so I have had you brought. You have caused me a lot of trouble. Hence you must give me \$12,000 at once. If you do not get it here within two hours I will take you with me to our head-

quarters.' ---- tried to talk, but he was not allowed to say a single word, but was sent away under the guard of four soldiers, who had instructions to go with him everywhere and bring him back again within the two hours. He came back in the specified time with a little over \$10,000 and told the leader that that was all he could get. 'Very well,' he said; 'I will give you one-half hour to get the balance. If it is not here in that time you shall go with us, and in case we meet the Federal troops I shall put you up in our front line.' Then turning to one of his aides he said: 'Captain, order a horse saddled to be ready for this gentleman within a half hour.' ---- got the money and the incident was closed. Soon after the rebels rode away. A few of them came back by train on Wednesday afternoon. With this exception we have not seen them since, though they are still in the neighborhood. On the whole they were very orderly, and no one has any reason to complain of treatment received.

"A few men learned that when orders are given it is wise to obey at once and not delay. Between money and animals they must have taken from Zitacuaro from \$60,000 to \$70,000, quite a number of rifles and a good supply of ammunition.

"July 28, 1913.

"We are still cut off from communication with the rest of the world, but the city is assuming little by little its normal condition. Rumors of all kinds are in circulation, many of which are contradictory. Among them it is rumored that the U.S.A. has notified Mexico that she intends to intervene within two weeks. We are not worried about it, for we do not believe it. This letter will go out with the first mail.

"None of us have suffered in health because of the strain to which we have been subjected. The Sunday School yesterday was much better attended than it was a month ago, when there was perfect peace. 'We were very glad to note that it is not easy to frighten our people here in Zitacuaro. We place ourselves in God's care and believe that nothing serious will happen.

"A few weeks after the 'Decina Trajica we ventured on another risky trip. Got my first experience of a few days on the edges of the hot country. I have wondered since which was the worst, the heat or the mosquitoes. One morning I counted eleven mosquito bites on my left ear. Again, as before, we left Tuzantla just ahead of the rebels. That morning we took breakfast at a ranch where two weeks before the rebels helped themselves to a feast of fourteen steers from the hacienda. Also took dinner at a place where the week before the Federals had 'completamente' defeated the rebels and a few days later the papers had a glowing report of the Federal gallantry.

"All this excitement and unsettledness was not very conducive to language study and the training I might have had and would have received had we been able to live in peace and follow out our plans. However, in spite of the unsettled conditions, I kept myself occupied. Have had direct charge of a small congregation close by Zitacuaro, where I held services every Sunday afternoon and have done pastoral work during the week. For several months also taught English and gave the boys gymnasium drills in the Boys' School at Zitacuaro.

"From what I know of the Zitacuaro district I am convinced that we have there a most promising field. A field in which a missionary can make use of all he ever knew or can expect to know. He can call into action his knowldege and experience as a preacher, pastor, organizer, physician and horse doctor, farmer, athletic skill, etc. Indeed, it presents a most promising field to a young man who wishes for a big place and a busy life. The resources and opportunities are legion. Of course, that can be said of any place where there are souls. Yet, from what I have been told and have been able to learn, there are few places in Mexico that are so open and the people so liberal to the Gospel. This is a place where we ought to concentrate a liberal part of our attention and strength.

"In February I accompanied Mr. ---- on a two days' trip to Patamboro, where I got my first idea of the tremendous opportunities the Mission has in connection with the large ranches. I was surprised to see about 225 crowded into a small room, and many had come miles across the hills with but a footpath as their road. I also went on a short visit to the Santa Cruz Indians, where we held services over Easter Sunday. The entire village is Protestant and everybody turned out, yet it seems that the work has just been taken up by the Mission. There were more than 250 present at the service. What an opportunity at that place for some one to invest his life! The little I have seen of the district makes me convinced that the State of Michoacan offers a rich field for a prospector of the type Dr. Charles Gordon describes in one of his hooks."

The Rescue of an Elder

"I HAD gone to bed," writes a missionary, on February 6, "when — came in and told men that Daniel Chavez was out in the other room and wished to speak to me. I told him to come in and he informed me that Julia Cejudo has just arrived on the train, bringing the news that the rebels had visited their ranch and carried off as prisoner Don Guadalupe, and that they wanted me to see what I could do to get him free. * * I told them that in case it would be possible for me to speak with the Prefect at once I would get up and go to see him. They came back and told me the Prefect would receive me at once. I went to the Prefect, who was in the theatre, told him what had happened and he said that he had already received the news and that a force would be sent out at once to see if it could rescue him.

"I went back and found Julia and Mrs. Garfias in the house. They told me the story as to what had happened. The rebels had taken Don Guadalupe (the most important man in the ranch congregation of Aguacate) because he had not been able to pay \$1,500 that they demanded, and she did not know what they had done with him. * * * Later-I expected to go out to Santa Maria to hold services, but when I was ready to start a man came and told me that he and other friends of Don Guadalupe wanted to have someone 'de confianza' go out into the district to the west and see if Don Guadalupe could be rescued by the payment of money. It was plain to see that he wanted me to go, so I told him that I would go and do what I could in a deal with the rebels. They got together the amount of \$500, and I left about 12:30 o'clock in the direction of Tuxpan, not knowing just where I would

finally get nor when I would get back from the trip. There were all kinds of rumors flying around as to the number of the rebels and their whereabouts. We did not know whether we would be able to get to Tuxpan without meeting them or not, or whether we would be able to meet them at all. I don't know just how I felt. I had to meet them in order to enter into negotiations with them, and yet I did not know whether they would respect me and let me go afterwards, or whether they would take the money and then demand more for my ransom. It was rather a delicate business to handle. I was asked by his friends to go to Tuxpan and get in touch with a certain man, who would be able to help me in the matter. When we arrived at Tuxpan we learned that there were no rebels in the immediate neighborhood and that the man I was seeking had gone to Mexico City. Then I did not know what to do. There were rumors that the rebels would attack Tuxpan that night; in that case I did not want to be there, for I am not very well acquainted with that town and its people and had no way of knowing whether they would be friends or not, and I had those \$500 with me. I decided to go to Aguacate that same afternoon, as I thought it would be safer in the country than in the town. It was after dark when we reached the ranch; there was no light in Don Guadalupe's house, so we went on to that of Don Antonio (brother), where we found him and his wife and Mr. Ariceaga (student of Coyoacan). They told me that the rebels had released Don Guadalupe after taking him about three hours' journey up into the mountains, and that he was all right. They released him on the condition that he deposit in a given place the sum of \$100 within five days. The following day I was with Don Guadalupe. He told me his story, as follows:

"That particular rebel band was made up of 120 men. They had spent Saturday night in Agostadero (another Protestant ranch) and at daylight had crossed over to the house of Abram Lopez, Protestant, whom they took prisoner and compelled to act as guide to the ranch of Aguacate. Here the band divided into two parts, the better armed one remained up on the top of the mountain range in order to guard the retreat of their companions in case of need, and the balance went down into the valley to the houses of the Vaca brothers for the forced loan. After leaving Don Guadalupe's home they scattered and took all the horses they could find, as well as clothing, blankets, etc., and a promise of money from Don Antonio. They were going to take his wife, but let her go on the promise of a deposit of \$100. With Don Guadalupe the case was different; they demanded \$1,500, which he could not give. When they started with him his wife followed on foot with her children crying loudly, as well as many of their peons. In that way they traveled for three hours, the rebels insisting that he give the money and he protesting that he did not have it. Finally they began to talk about a smaller sum, and at last they let him loose on the promise that I have indicated.

"After listening to his story and congratulating him that nothing serious had happened to him, we went on our way toward Patamboro (another Protestant ranch) to learn what had happened to Don Onesimo and his family. We learned that another band of rebels had visited them and taken horses and money, and on the promise of his giving more had not molested anyone on the ranch. I am told the rebels need arms and ammunition to undertake an active campaign against the Government. This is the reason why they are not attacking any of the principal cities in this State.

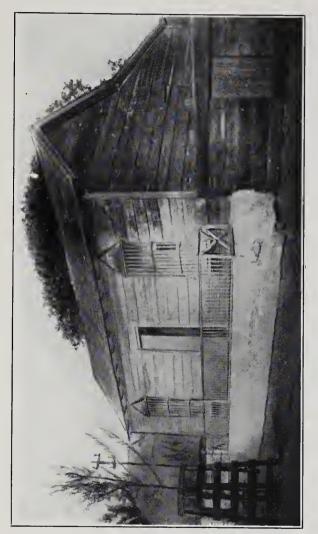
"We left Patambaro the next morning for Tuxpan and home again. As we were approaching the hacienda of 'Corucha' a man came riding toward us as fast as he could and as he passed he shouted : 'They're coming ! The colorados are in los trojes.' We hurried up and got to the hacienda as fast as we could and found that the proprietor and peons were out in the road all looking up toward the mountain pass. Every once in a while one would say, 'there they are !' I confess I saw nothing, so I said to Luis, 'come on, let's go ahead.' We bid good-bye to the people and rode on, but had not gone far when Luis called to me and said, 'there is one riding towards us.' I stopped my horse and looked. Sure enough a man was coming towards us on horseback. Luis called out again, 'there is another one,' and it was true. As they seemed to be coming our way on a dead run on their horses I thought it a part of prudence to turn around and take the back track. We went back to the hacienda as fast as our horses could go and several called out, 'hurry up before they take your horses.' * * * Then we returned to Zitacuaro in a roundabout way. A large part of the time we rode at a gallop. We must have ridden about 34 miles after leaving Tuxpan."

The Presbyterian Opportunity in Yucatan ONE of the Presbyterian missionaries who has paid a recent visit to Yucatan writes:

"Yucatan is fascinating. This field is great. I have always been told that it was the paradise of our Mexican work, but I never before realized the need and the great opportunity we have in Yucatan. There is not another church but ours here and our church is

but playing with missions in Yucatan. The peninsula of Yucatan is ready now to be taken for Christ and the Presbyterian church. Let us do something or hand the whole thing over to some church which will. We need a good school in Merida (about the center of our work) right away. The Merida school would be a feeder for Posadas Normal. We have visited Ticul and Muna, two villages of several thousand inhabitants. With a little visiting and work, not to mention prayer, I believe those villages could be made evangelical in a very short time. The people are so friendly, so hospitable and so 'sympatico' that they received us with open arms. At Muna, Liborio Blanco, a lavman who is doing such a good work as pastor, teacher, shoemaker, local judge, and a few other odds and ends, to keep soul and body together, is simply magnificent. He must have an assistant in the school so that he can do more work as a pastor. He is invaluable. as he knows the Marja language, and many of the people in Muna do not understand Spanish.

"In the thirty-odd years of our work in Mexico I was the first missionary's wife to visit this field. Yucatan can certainly be called the neglected peninsula. We are all at the home of Rev. Ascunsion Blanco, a graduate of the Sem. (1909) and a fine young man, brother of Liberio Blanco at Muna, who is doing such a grand, good work. A third brother, Francisco, lives just across the street. This house which Ascunsion rents for church and house, is for sale and A. says he thinks it can be bought for 4,000 pesos, most reasonable, for it is very large, on a main street, and well adapted to a church and a school if we should ever have one in Campeche. The people have about 700 pesos towards their building fund.



HOUSE WHERE EVANGELISTIC SERVICES WERE FIRST HELD IN THE PORT CITY OF PROGRESO, YUCATAN. THIS IS NOW A CHURCH BUILDING.

"We hear nothing of revolution down here and Mexico City may be a mass of ruins by now for all we know. Everything was as it has been for three years according to last week's steamer's mail. When we return to Muna we will have news a week *newer*.

Progreso, Muna, Ticul, Merida, etc., etc., are all worthy of a special letter and I hope when I get home there will be odd moments to tell you something about each place. I should be back now, but would have been obliged to give up visiting Campeche and I don't propose to omit any more of Yucatan and Campeche than possible. Bad enough to have to omit Tabasco."

Proclamation by General Emiliano Zapata

To the inhabitants of the City of Mexico.

E MILIANO ZAPATA, General in Chief of the Divisions of the South and the Center, to the inhabitants of the City of Mexico. Let it be known:

I. That in council of war it has been determined to take the City of Mexico by blood and fire.

2. That unrelenting justice will be meted out to all the enemies of the cause that are responsible for real crimes, being judged by authorities who shall be named for the purpose.

3. That the property of the condemned shall be used for the support of the Constitutional army.

4. That all officers and commanders of the so-called Federal army will be shot without trial, because of being the only ones who are supporting the usurper.

5. That in case of surrender before the beginning of the combat the lives of such will be respected, in case they are not guilty of other crimes. 6. The traitors, Huerta and Blanquet, after a swift process of law, will be degraded publicly and hanged in the balconies of the National Palace, as a universal warning.

7. The rest of the cabinet will be shot without further cause.

8. The lives and interests of the foreigners who are neutral will be respected. Only those will be punished who have taken active part in the politics of the country, after trial.

9. That five days will be given to the inhabitants of the City of Mexico who wish to get away from the horrors of the fight to leave the city.

10. All the executions will be public in the Plaza de la Constitution.

11. The unworthy press will say that forces have been sent out and that they have defeated us, but this will be false, for all we have ever seen is the backs of the Federals.

12. As it favors the best results the day when the assault on the city is to begin will not be known.

Cuartel General en Milpa Alta, D. F. Dec. 16, 1913.

Dec. 16, 1913. GENERAL EMILIANO ZAPATA.

Note-This "manifesto" was distributed widely in the City of Mexico.

THE most hopeful aspect of the entire situation in Mexico is the action taken at Garden City in January by the representatives of the various boards at work in Mexico. We give the synopsis of this action, which has been transmitted to the boards and is now being carefully and prayerfully considered.

When all the Protestant forces at work in Mexico unite the day of Mexico's redemption draweth nigh! There was a unanimous feeling that the situation in Mexico had presented an occasion for a careful restudy of the missionary work in that country and for such rearrangements which would increase its efficiency and provide more adequately for work throughout the whole eountry. After full discussion the following conclusions were reached with the understanding that while every board might not be able to participate in every one of the measures proposed, each board would do all that it could, and would encourage its missionaries to carry forward the principle of co-operation to the fullest extent in the readjustments of the work in Mexico after the revolution.

I. It was voted that it is the judgment of the conference that one missionary paper in Mexico should be sufficient, this paper to provide special facilities wherever desired for the presentation of the work of any one denomination to its constituency.

2. It was voted that one set of Sunday School lessons and lesson helps ought to be sufficient, with such adaptation as might on oceasion be found necessary for the use of particular bodies.

3. It was voted that it was the judgment of the conference that the separate Mission Press establishments might wisely be merged into one.

4. It was voted that it was the sense of the conference that the several training schools or theological classes should unite, and that one such school (or, for territorial purposes, perhaps two) would serve the purpose in Mexico.

5. It was voted that the question of co-operation in arranging property titles or securing any proper government recognition should be referred to the Com-



IN A PRIVATE HOUSE IN MEXICO.

mittee on Latin-America, with authority to confer with the Committee on Reference and Council if deemed wise.

6. It was voted that it was the sense of the conference that the Girls' Schools should co-operate and unite wherever possible, and that the Committee on Latin-America, after conference with the Women's Boards having Girls' Schools in Mexico, should make a suggested scheme of co-ordination and unity for these schools.

7. It was voted that it was the sense of the conference that there might wisely be some redistribution of territory, looking to the more adequate occupation of the field, and the matter was referred to the Latin-American Committee, with the request that they confer with the Boards to ascertain whether there could be adjustments made which would secure the occupation of the whole field.

8. It was voted that there should be a conference of missionaries at work in Mexico, held either in the United States or in Mexico, as should be deemed best, to make a restudy of the work in Mexico and to carry out the plans recommended by this conference when approved by the Boards.

9. It was voted to recommend to the missionaries in Mexico the preparation of a statement to the Mexican nation, after the fashion of the statement issued by the missionaries in Japan last year, showing the substantial unity of the missions in their message and appealing to the Mexican people with a united voice at this time of their realization of their needs, such a statement to be ready to be issued when the present time of disorder is past. It was suggested that the missionaries now in Mexico City might at once take in hand the preparation of such a statement to be submitted to missionaries in other parts of the country and prepared for the signature of as many of the missionaries in Mexico as possible.

10. It was voted that the attention of the Missions be called to the desirability of arranging for the transfer, between denominations, of church members moving from one section of the country to the other, according to the principle which has been recognized by all the churches, including the Church of England and the Friends, in fields like Madagascar.

II. It was voted to recommend to the Latin-American Committee that it should enlarge itself by adding one member from each Board carrying on missionary work in Latin-America, in order that the Committee might be fully representative, this enlarged committee to authorize the present committee, or some correspondingly small number from the enlarged committee, to act as an executive for the whole committee.

At the last meeting of the committee special attention was given to the two subjects of educational work in behalf of the Latin-American Missionary the and of one or two Latin-American Missionary Conferences to be held in 1916.

The formal opening of the Panama Canal and the Panama Exposition will direct attention to Latin-America. There will be an increased issue of books and magazine articles on the Latin-American lands. Those conditions in these countries which demand the friendly help of the Christian churches should be set forth adequately at the same time. We would suggest that each Mission in Latin-America should arrange to have its work and the conditions in its field set forth effectively and continuously by articles in the church papers and magazines at home, and that articles be supplied also of a character that would secure their admission in secular magazines. The Committee would be glad to receive such articles and to seek their publication. We should be glad to render any help also in securing publishers for good missionary books on Latin-America.

With regard to a Latin-American Missionary Conference we have heard of the appointment of a Committee in Chili to communicate with the missionaries in other Latin-American fields with a view to the holding of such a conference. We are in correspondence with this Committee and shall be glad to act as a Central Committee for the Latin-American lands in this matter. Will you kindly let us know your judgment on the following points:

I. Would it be better to have one conference or, dividing the Latin-American field, two conferences? In the case of one conference, would Rio de Janeiro be the most central place? In the case of two, would it be well to have one conference for the southern half of the field in Buenos Aires, and the second for the northern half in Panama, Havana, or Mexico City?

2. When should the conference be held?

3. Should it be a quiet conference of missionary workers, or should it be made the occasion of a courageous, evangelistic campaign in the city where it would be held, with a view to a positive evangelistic movement? As a commentary on the action of the Assembly nearly a hundred years ago, note the following facts gleaned from the report of a missionary:

- "The States of Yucatan, Campeche and Tabasco are among all the states of the Republic
 the peculiar heritage of the Presbyterian Church and its chief glory."
- 11. "We have no other field so absolutely loyal and so full of promise.
- 111. "It is a burning shame that in the thirty years since work was opened there, we have not had even one missionary family resident in some one of its larger centres and representing the interests of the Mission.
 - IV. "It is of the utmost importance that without further delay one of our experienced missionaries be appointed to live on that field.
 - "If we do not take this step, we will be held responsible by future generations for culpable neglect of a real and great responsibility.



FUENTE DEL SOL-MEXICO CITY A fountain at the terminus of one of the old aqueducts of the early days that supplied the city with water. Carnegie Endowment for International Peace

DIVISION OF INTERCOURSE AND EDUCATION

Publication No. 5

INTELLECTUAL AND CULTURAL RELATIONS

BETWEEN THE UNITED STATES

AND THE OTHER REPUBLICS OF AMERICA

BY

HARRY ERWIN BARD

ENGLISH EDITION

PUBLISHED BY THE ENDOWMENT WASHINGTON, D. C. 1914



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THE YEAR BOOK OF THE CARNEGIE ENDOW-MENT FOR INTERNATIONAL PEACE, PUBLISHED ANNUALLY, OR ANY OF THE ABOVE, MAY BE HAD ON APPLICATION TO THE SECRETARY OF THE EN-DOWMENT, 2 JACKSON PLACE, WASHINGTON, D. C.

PREFACE

From the organization of the Division of Intercourse and Education of the Carnegie Endowment for International Peace in 1911, one of the bits of work most clearly in mind has been the development of closer acquaintance and better understanding between the peoples of the various republics on the American continent. Owing to difficulties and delays interposed by distance as well as by slow communication, it has not been possible to proceed as rapidly with this part of the work of the Division as had been hoped. One or two plans that had been fully worked out failed of execution because of the illness of those who had been selected to execute them. On the other hand, something has perhaps been gained by the necessary delay. It has been possible to study more closely the various elements of the problems involved and to seek and obtain advice from leaders of opinion in the various countries of South America.

In pursuance of these plans and of the information and advice so gained, Mr. Robert Bacon made a noteworthy journey through some of the chief South American capitals in the summer of 1913. He explained in forceful and sympathetic fashion the organization and purpose of the Carnegie Endowment and took steps to form branches of the American Association for International Conciliation and of the American Society for International Law in the countries that he visited. Mr. Bacon was everywhere received with much cordiality and was listened to with marked and sympathetic attention.

Following Mr. Bacon's visit, a Pan American Division of the American Association for International Conciliation was organized. One of its first tasks was to arrange for the visit to South America during the summer of 1914 of a group of carefully selected and thoroughly representative teachers in the higher educational institutions of the United States. The object in view was to assure the presence in various widely scattered educational institutions in the United States, of men who had seen South America with their own eyes, who had talked with its representative men, and who could speak with some authority concerning the problems and activities of the other American republics.

That this task was successfully accomplished is plain to the reader of the report herewith presented. Those who made the trip have returned to the United

PREFACE

States full of enthusiasm for their South American friends and neighbors. They have gained much new information and will be able to make good use of it in aid of the purposes and policies of the Carnegie Endowment.

The important suggestions for future work that are contained in this report will be made the subject of careful study and such of them as are accepted by the Trustees of the Carnegie Endowment will be put into execution.

The peoples of the several American republics are being each year drawn together more closely than ever before. So soon as they find ways and means of breaking through the barriers which have been erected by difference of language and by separate political and historical traditions, and come to a complete understanding of each other's civilization and plan of life, they will be able to exert a profound influence on the Old World, because of their essentially identical ideals and their common devotion to free institutions.

> NICHOLAS MURRAY BUTLER, Acting Director

October 21, 1914

DEVELOPING CLOSER INTELLECTUAL AND CUL TURAL RELATIONS BETWEEN THE PEOPLES OF THE UNITED STATES AND THOSE OF OTHER REPUBLICS OF AMERICA

A Report

On a tour of the principal Capitals of South America by a party of university men under the auspices of the American Association for International Conciliation; considered as a part of the plan for the development of closer intellectual and cultural relations between the peoples of the United States and of the other republics of America undertaken with the sanction and support of the Carnegie Endowment for International Peace.

To the Trustees of the Carnegie Endowment for International Peace:

In accordance with the provisions of a resolution of the Executive Committee of the Endowment adopted December 20, 1913, the organization of work for developing closer intellectual and cultural relations between the peoples of the United States and of the other republics of America was begun immediately after this date under the auspices of the American Association for International Conciliation, as provided in the resolution.

The Pan American Division of the Association was organized, the objects of which as announced in its first bulletin issued January, 1914, are briefly as follows: to collect and to distribute reliable information; to encourage interchanges of students and teachers, and the exchange of visits of representative men and women, to promote the study of the official languages, the literature, history, laws, institutions, social practices, etc., of different republics; to encourage opening of special institutes for social as well as for intellectual and cultural purposes; and, finally, to establish and maintain close relations with all other organizations or institutions with which practical coöperation along these lines is possible. The relations of the United States with the other republics of America up to the present have been almost exclusively of a political and commercial character. Doctor Emilio Frers, of Argentina, has observed only recently that "the commercial and political relations maintained up till now have not been sufficient to form the foundation of reciprocal treatment on the basis of social equality which should correspond to peoples whose high estate of civilization entitles them to exact the integral recognition of their international personality."* A century or more of experience trying to establish satisfactory friendly relations between our people and the peoples of these republics on such a basis tends to confirm the exactness of this observation.

There are many reasons why our relations with the peoples of these republics should be close and intimate. Our political ideals ought to be much the same; our social problems are in many respects alike; our interests are very largely reciprocal. We have much to learn from the peoples of these republics, and they have something to learn from us. Where they are strongest we are deficient; where they are weaker we are strong. There are no other nations in the world with which we should have so much in common; and there are no other nations whose important interests are reciprocal at so many points.

Notwithstanding these facts, a century of uninterrupted political and commercial relations between these republics and the United States has not been sufficient to effect the close bonds of friendship desired between their people and ours. On the contrary, the people of the United States have the unenviable reputation, almost world wide, of being disliked by the peoples of these growing states. It may be granted that this reputation is not too well founded and that it is much exaggerated by many; but it must also be admitted that it is not wholly without foundation in fact. It is not the intention to discuss here the justification of this reputation or the origin or immediate causes of the dislike, in so far as it exists, or to determine the full responsibility for its continued existence, although such discussions would have value. The more fundamentally important consideration is the condition of things which encouraged such a reputation and made possible the development of any such dislike or now enables it to continue to exist.

These twenty of the twenty-one republics of America aggregate an area of some 9,000,000 square miles or three-fifths of that of the whole American continent. The area of Brazil alone is some 3,000,000 square miles, or a little greater than that of the United States. The total population of these twenty republics now is about 80,000,000. Their increase in population until recently has been slow, for very good and obvious reasons. The center of the east and west tide of travel and relations was at the beginning of the century about 40 degrees north latitude, from which point it has been moving slowly south to a latitude now of about 25 degrees. It has at the same time been gradually widening. There is

^{*} An address, American Ideals; published by the Museo Social Argentino, Buenos Aires, 1914.

every reason to believe that these processes will continue, and will be much accelerated in the near future. Furthermore, a new north and south tide of travel and relations is now beginning to develop. The material progress in recent years of some of these republics has never been surpassed. The influence of such changes upon them will be great, and every phase of their development must be affected.

Between the peoples of the United States and these other republics of America there is little common knowledge and experience. We have almost no intellectual or cultural relations with them. The official language of one of these republics is Portuguese and of eighteen Spanish. These languages are as yet little taught in the United States, and the provisions made for teaching the literature, history, laws, etc., of these countries are very limited. Our political and commercial relations with them have no foundation in culture and learning; we are almost totally ignorant of the psychology of their people. The usual knowledge of them, derived for the most part from the daily press and through inferences based on information gained from school text-books, is not such as to inspire great respect. It is not infrequent that persons are placed in positions of responsibility affecting our relations with them, who know nothing of their language or social customs, much less of their literature, history, laws and institutions. This happens here as well as in those countries themselves.

With Europe our political and commercial relations have for their foundation hundreds of years of common culture and learning. The regular east and west tide of travel and relations has favored us in many ways. Every year hundreds of thousands of people come to make their homes among us; many come to travel and to study, and thousands of our people go to Europe for similar purposes. With England we have the advantage of a common tongue; and the literature, history, laws, and institutions of England are taught in our schools, as are also the languages, literature, history, laws, and institutions of France and of Germany. Our children are inspired to hold the people of those countries in high respect. These are the three important nations with which our political and commercial relations have been closest and, moreover, comparatively free from misunderstandings and needless friction.

Relations of an intellectual and cultural character of other republics of America with the nations of Europe are close. The early culture and learning of eighteen of these republics were inherited from Spain as was also their language. Brazil inherited her language, and also her early culture and learning from Portugal. With these European states close intellectual and cultural relations have been maintained; and also similar relations have been established and maintained with other important nations of Europe, as England, France, Germany, and Italy. In most of these republics French is made the second language, and text-books in this language are not uncommonly used in their schools. German is quite widely taught. Where English is taught it is always related to England, and not to the United States; as Spanish, where taught in this country, is usually related to Spain, and not to the fifty or sixty million people in America who use the Spanish tongue. The political and commercial relations of these important nations of Europe with the other American republics, while close, are largely free from the unfortunate misunderstandings and friction of which we hear so much in connection with our relations with these republics.

This condition of things is not the result of chance. In general it is due to intelligent and well-directed efforts. The peoples of Europe have understood the importance of close intellectual and cultural relations as a basis for close political and trade relations, as well as for friendly relations of a social character. They have studied the psychology of the people and have respected their dominant traits. They have trained men for service in these countries, and have lost no good opportunity to secure for them places of advantage. And they have not neglected to take the initiative. Their very rapid development of close political and commercial relations with these republics has only kept pace with the development of relations based on culture and learning, and consequently confidence and friendship with them have been sustained without apparent difficulty.

The people of the United States have in the past thought of these twenty American republics as representing some sort of a more or less harmonious whole, of which the term "Latin America" has been sufficiently descriptive to serve all our purposes, and not as twenty independent states each with its own national spirit and peculiar dominant traits. We have honestly, although more or less feebly, desired friendly relations with the peoples of these republics in every field of activity, but unfortunately we have scarcely taken notice of the fact that the fundamental basis of really close friendly relations in any line has not existed. Relations of an intellectual and cultural character between the United States and these republics have been almost wholly lacking. The importance of such to close friendly relations in the field of politics and commerce has received little recognition. As our political and commercial relations with these republics have become closer so has the general distrust of our political motives appeared to increase and cases of misunderstanding and friction in these and other relations have multiplied.

The fundamental remedy for this condition of things is to be found, it is believed, in the development of closer intellectual and cultural relations between the peoples of all the American republics, which shall keep pace with the development of relations of a political and commercial character. It is with this end in view that the work of the Pan American Division of the Association has been undertaken.

Since the opening of this division and the adoption of the program to which reference has been made above, the most important work accomplished has been the organization and conducting of a party of university men on a tour of the capitals and other important centers of the principal South American nations. This tour was to cover a period of some ten or twelve weeks, and the party taking it was to be composed of ten or twelve representative men chosen from various important educational institutions and systems in different parts of the country.

No such visit as this had been made before to these capitals by educators from this country. Plans had to be made from the ground up, and with very little exact knowledge to guide us. Work was begun immediately, to get together information, arrange an itinerary, and organize the party. Letters and memoranda of information were sent to the diplomatic representatives in Washington of the countries which we expected to visit; and an expression of special appreciation is due for the generous spirit of coöperation shown by all these distinguished gentlemen. Letters were addressed to about one hundred of the leading educational institutions and city systems of the country asking that from their teaching staffs or alumni one or two persons be recommended who might be considered in making up the number of those who should be invited to make the trip. It was intended that this plan should arouse the interest and gain the sympathetic coöperation of these institutions and practically assure at the same time the representative character of those who would make up the group. Those who composed the party were invited not so much as individuals, as representatives of the institutions which officially recommended them.

Two of the eleven men who were selected to compose the party were chosen from the field of secondary education; eight from colleges and universities, and one was a specialist in educational administration. Three of those chosen from colleges and universities were interested primarily in the Spanish language and literature; one in history; one in political science; one in political economy; one in commercial economics; and one in industrial economics. Departments of law, of medicine, and of the applied sciences were not represented, which it is now thought was unfortunate, as these three lines of higher instruction receive special attention in all the republics visited. Directly or indirectly, that is either as members of the teaching staff or as alumni, these men represented some thirty different American colleges and universities and also a considerable number of foreign institutions. The men selected were for the most part comparatively young, having their future before them, yet with training and experience sufficient it was thought to enable them to derive the greatest profit from the trip. The institutions directly represented were as follows: Bushwick High School of Brooklyn; Carnegie Institute of Technology of Pittsburgh; College of the City of New York; Columbia University; Manual Training High School of Kansas City, Missouri; Simmons College of Boston; University of Chicago; University of Illinois; University of Nebraska; University of Wisconsin; and Yale University.*

The purpose of this tour may be given here in the language in which it was stated in connection with the special announcement of the itinerary and personnel of the party, which is as follows:

^{*} See Appendix II for personnel of party.

"This tour is a part of the general plan of the American Association for International Conciliation to encourage exchange of visits between persons distinguished in different callings or professions in the United States and in other republics of America in connection with the work of developing closer intellectual and cultural relations between the peoples of these republics. The immediate object of this visit is to become acquainted with some of the leading personalities of the countries to be visited, to know some of the more important institutions, to become familiar with the method and material of instruction in certain important subjects, such as geography, history, languages, etc., and to gather information and to collect material relative to different phases of higher education, particularly such as will have especial interest for graduate students of the United States.

"It is expected that as a direct result of these visits much will be accomplished which will tend to improve instruction in our schools in the geography of the South American States, the history of early civilization in the new world, and in Spanish colonization in South and Central as well as in North America; to promote instruction in the Spanish and Portuguese languages and the better articulation of this instruction with the life and the institutions of the peoples of America who speak these languages. It is hoped also that through these visits the exchange of students, of teachers and professors or specialists in different fields may be successfully encouraged. Back of all this is, of course, the development of a common knowledge and experience which is fundamental to good understanding and friendly relations between nations."

The party sailed from New York May 30, 1914, on the steamship Vandyck, direct for Rio de Janeiro. A considerable number of the best recent books on South America and on the particular countries which we were about to visit, also special bulletins and maps, were provided for reading and reference on the voyage. On board outlines were prepared with suggestions of matters for observation and relative to which data and information might be collected. Meetings were held for the purpose of discussing matters of interest. I would not say, however, that these measures were entirely successful or that they served as a wholly satisfactory preparation for what was before us.

Rio de Janeiro, the capital of Brazil, was our first important stop. Two short stops were made, however, before reaching this splendid city. One of these was at Barbadoes, and the other at Bahía. In the latter place we were cordially received by a committee headed by Doctor Arlindo Fragoso, secretary of state, accompanied by Mr. Robert Frazer, Jr., American consul, and taken to the palace of the governor, where we were officially received by the governor, Doctor José Joaquim Seabra. After visiting the school of medicine, where we were received in the hall of honor by the dean and other members of the faculty, the normal school, and other institutions, luncheon was prepared for us at the home of Doctor Fragoso. After luncheon we were taken for a ride about the city, and we returned to the ship late in the evening.

At Rio de Janeiro, the secretary and the military attaché of our embassy met us in port, and a committee appointed by the government of Brazil awaited us at the hotel. A complete program was already prepared, which consumed practically all our time for the next five days. There were included in this program visits to schools of different kinds and grades and to such institutions as the National arts gallery, the National library, Oswald Cruz institute, Geographical society, the Military school, also rides about the city and short excursions into the country. This program was full of interest and one would not willingly have missed any part of it, yet it was much regretted that there was not more time for personal appointments. Some of the schools and other institutions visited deserve to be better known in the United States than they are, and it is hoped that something may be done soon to accomplish this. The Military school, in particular, which is under the direction of Colonel Alexandre Barreto, is an institution of which any country might be proud.

The general interest shown in our mission and in work generally for the development of closer intellectual and cultural relations between the people of the United States and those of Brazil was good. I was able to discuss somewhat at length possible future work of the Association with Ambassador Edwin V. Morgan; Consul General Julius Lay; Secretary to the embassy, Mr. J. Butler Wright; Doctor Amaro Cavalcanti, Judge of the supreme federal court of Brazil; Doctor Helio Lobo, of the foreign office; and the Secretary for the Association, Doctor A. G. de Araujo Jorge also of the foreign office. All these gentlemen have real interest in the future development of the work in Brazil and offered some valuable suggestions in this connection. The importance of immediately following up our visit in some effective manner by keeping alive and broadening the connections made was emphasized by all. It was the general opinion also that some permanent local organization or agency should be established in Rio de Janeiro as soon as practicable.

One suggestion was made that the Association might appoint a secretaryat-large who would be assigned to Rio de Janeiro as an expert assistant to our present local secretary, Doctor A. G. de Araujo Jorge. Such an assignment would be for an indefinite period, and could be changed whenever it appeared that the services were no longer needed. It would be the duty of such a person, while acting as assistant to the regular secretary for the Association in Rio de Janeiro, to make such special studies as the Association might require, and to suggest plans for the future development of the work of the Association in Brazil. This idea was cordially endorsed by Mr. Morgan, Doctor Cavalcanti, and also by Doctor de Araujo Jorge.

The time is opportune to begin some kind of effective work in Rio de Janeiro and no doubt also in other important centers of Brazil. There can be

no doubt, it is believed, as to the need of some permanent local organization, or of a man who understands the psychology of the people of Brazil and also the aims and purposes of the Association, who will coöperate with the present secretary, under whose diplomatic influence a satisfactory organization may be inspired, established and directed.

From Rio de Janeiro we proceeded to São Paulo, and from there to Santos, where we took the steamer for Montevideo. In São Paulo we were able to accomplish little, as schools of all kinds and grades were closed for their midyear vacation and most of the teachers and professors were out of the city. The Faculty of Law was an important exception, an institution which we had the pleasure of visiting. We visited also the State Senate and Chamber of Deputies. Visits were made to some of the more important educational institutions merely for the purpose of seeing something of the character of their excellent buildings and equipment. We were greeted here by Doctor José Custodio Alves de Lima, who accompanied us during the day. São Paulo is a thoroughly progressive city, whose people show intelligence and purpose in all their movements. The ride from Rio de Janeiro to São Paulo was an exceedingly interesting one, largely through a rich but as yet more or less undeveloped country.

In Montevideo our reception was no less cordial than in Rio de Janeiro. A complete program had been arranged for us, with which we were greeted by an official committee upon our arrival. Although we were only three days in this important city we were able to accomplish a great deal, visiting institutions and meeting distinguished men. The public men and particularly the educators of Uruguay are eager for the development of closer intellectual and cultural relations with the people of the United States. Much was said of the possibility of the exchange of teachers and students. At the time of our visit much interest was being taken in the Panama Exposition of 1915 at San Francisco and an important educational exhibit was being prepared. It is expected that a considerable number of persons from Montevideo will visit the United States in one capacity or another during the next twelve months.

Montevideo is a modern city of some three hundred and fifty thousand population. For its size it has more fine public buildings recently constructed or in process of construction than any other city which I have seen at any time. There is much interest in public education and the schools visited were remarkably well installed and admirably equipped. The university gives one the impression of an excellent modern institution. The school of agriculture and the veterinary and trade schools are all somewhat removed from the city and are well provided for. In one of the elementary schools for girls a number of pupils greeted us with carefully prepared addresses, which would have done credit to much older pupils. In the normal school for girls also a short address of welcome was delivered by one of the pupils. We visited in Montevideo an "Oficina de Exposición," which undertakes to furnish to inquirers all kinds of information relative to the country. This office will furnish lantern slides to schools or to responsible individuals interested in spreading accurate knowledge or information about Uruguay. It is in charge of Mr. Eduardo Perotti, who is a competent person and has great enthusiasm for his work.

We were particularly impressed while in this important capital with the interest which the public men were taking in the social questions of the day, a phenomenon to be observed also in other republics. Uruguay gives promise of becoming a veritable laboratory for the experimental study of important modern political and social problems, for which it is admirably fitted. It is comparatively limited in area and in population, and is relatively free from that extremely conservative element found in all older countries, which makes important experimentation in democracy and social betterment always difficult and often practically impossible.

It is but a night's journey from Montevideo to Buenos Aires, where we were cordially received by members of a committee named by the government headed by Doctor Ernesto Nelson, inspector general of secondary and special instruction, accompanied by our chargé d'affaires, Mr. George Lorillard. The general scheme of a program was already prepared, but opportunity was given for modifications to suit our wishes. After our experience in Rio de Janeiro and Montevideo, it seemed advisable that our program in the future should be made somewhat less rigid and that more time should be allowed for purposes of making individual appointments, and an attempt was made here to prepare a program accordingly. It was found, however, that if we were to see only the things most important which we wished to see, it would require about all our time.

In accordance with special instructions from President Nicholas Murray Butler, Acting Director of the Division of Intercourse and Education, I called in Buenos Aires on Doctor Luis M. Drago; Doctor Emilio Frers. President of the Museo Social Argentino; Señora Angela de Oliveira Cesar de Costa, President of the South American Association for Universal Peace; and Mr. Frank N. West, a correspondent of the Endowment, and conveyed to these distinguished persons respectively messages entrusted to me for them. Doctor Benjamin Garcia Victorica, Secretary for the Association, was seen also. At the time of our visit to Buenos Aires Doctor Drago was engaged in carrying on an important debate with the distinguished statesman, Doctor Estanislao S. Zeballos, over a bill which was before the Congress to authorize the National Government to sell the new dreadnought recently launched at the Charleston shipbuilding yards, a question which was attracting unusual attention. Upon the occasion of my calling, Doctor Drago was particularly cordial, expressed his special appreciation of the courtesies shown him, and his deep regret that he had not been able to accept invitations which he had received to visit this country.

Doctor Emilio Frers presided over the official committee nominated to provide for our reception in Buenos Aires and was active in this work, besides showing us other courtesies. He is much interested in the Museo Social Argentino and in his work as President of this important institution. He is considering a plan of giving to this institution international as well as national character by inviting foreign nations to establish and to maintain by private initiative and support, special sections or institutes for the propagation of their culture and learning in Argentina, and to act as agents for the propagation of the culture and learning of Argentina in their own respective countries. Each such institute established would be under the control of a local committee or advisory board made up of prominent citizens of the two countries, with a special executive secretary who would be responsible to the board for its proper direction. All would have the moral support of the superior council of the Museo Social, under whose general control they would be conducted.

Doctor Frers was strong in the belief that some sort of permanent local organization would be necessary in order to maintain and broaden the important connections established through our visit. If the plan just mentioned of the Museo Social can be effected, it is believed that the Association might well undertake to establish and maintain the section or institute representing this country. In the contrary case, it is believed that as soon as practicable some one should be appointed to make a thorough study of the situation and make report as to just what would be the best plan to adopt. It is suggested that this work could best be done by a competent secretary-at-large of the Association should it be thought advisable to appoint one who could be assigned to do it. There is reason for great confidence in the Museo Social Argentino, and it is believed that some practical way will be found in which the Association can coöperate with it to accomplish the work which is to be done.

Doctors Ernesto Nelson, Raimundo Wilmart and Modesto Quiroga, all well known in this country, and Mr. Enrique E. Ewing, of the World's Student Federation, were other members of this official committee. These distinguished gentlemen, also Doctor Francisco P. Moreno and others, expressed their opinion that some sort of permanent local organization would be necessary to coöperate with the Association if the desired results were to be gained following this visit. Doctor Estanislao S. Zeballos, with whom I had the pleasure of a short half hour's conversation, expressed his very warm interest in the work being done by the Endowment in behalf of closer friendly relations between the peoples of the different American republics.

Señora Angela de Oliveira Cesar de Costa is very much interested in the development of the work of the South American Association for Universal Peace, of which she is the energetic president, and is eager to have additional material support for this work. She says the Society needs additional funds for the general running expenses, for the subvention of a special peace review to serve as the official organ of the Society, and for a new building. An excellent site has been selected for this building and plans have been already drawn. The estimated cost of such building is from \$250,000 to \$300,000. The whole success of her efforts depends, she thinks, upon securing funds for a suitable home for the Society, and she is anxious that the Endowment will make it possible for her hopes to be realized in this direction.

I had the pleasure of being the guest of Señora Angela de Oliveira Cesar de Costa at a luncheon to meet a group of prominent persons of Buenos Aires, who were especially interested in these plans. Among the guests at this luncheon were Mr. and Mrs. Francisco P. Lavalle. Doctor Lavalle is President of the Sociedad Cientifica of Buenos Aires, the courtesies of which institution he extended to the party immediately upon our arrival. I endeavored to make it clear to all that while the Endowment was much interested in the work of the Society and that every possible consideration would be given to their plans, it was by no means certain that the funds needed could be provided. It was explained that there were many demands for all the funds under the control of the Endowment and the contribution of any amount in support of these plans would mean the withdrawal of a like amount from some other worthy cause, a step which would be taken ordinarily only after very mature deliberation.

It should be said, moreover, that if the Endowment is prepared to provide funds for the erection anywhere in America of an appropriate building for the promotion of good international relations, in no country could such a building be made to serve better those ends than in the republic of Argentina, and in no city would it be more duly appreciated than in the capital of this republic. It is not, of course, the intention of Señora Angela de Oliveira Cesar de Costa that the South American Association for Universal Peace should occupy more than a small part of such a building. A building such as the one planned would accommodate also other societies and institutions working for good international relations.

After a little stay in the great capital of Argentina, we began to appreciate more than we had before the meaning of the contention that the more important states of South America were developing definite national characteristics of their own. Buenos Aires is quite distinct from Rio de Janeiro as this beautiful city is different from Montevideo. Rio de Janeiro is no doubt the most beautiful city in the world; Montevideo is a very fine city, more like one of our newer cities on the Pacific Coast. Nowhere is there a city which reminds one more of New York than the capital of the Argentine Republic. The people of each of these three states have developed distinctive characteristics which distinguish each from the other. All of them retain, however, that fine spirit of hospitality, for which they have long been known. The keen interest in our mission was in all about the same and there was in all about the same wish expressed that ways be devised by which the friendly relations established might be kept alive. All of the schools visited in Buenos Aires were of an uncommonly high character, and would compare favorably with the best in any country. In the University of Buenos Aires a very high grade of work is being done, particularly in the faculty of philosophy and letters. The University of la Plata is a modern institution, confessedly modeled somewhat after institutions in the United States. Short visits to some of the secondary schools, normal schools, school of commerce and trade school enabled the party to appreciate the pride with which these are regarded there. The character of the pupils, the teachers, the general equipment and buildings, together and independently, are such as to inspire admiration.

Special mention should be made of a school of modern languages (Escuela de Lenguas Vivas) which we had the pleasure of visiting. In this school are given two courses, one a general course covering a period of six years and the other a professional course covering a period of two years. The former is a preparation for the latter. The professional course is for the training of teachers of languages. After two years in the general course, pupils elect the one of the three foreign languages, English, French, German, in which they wish to specialize. The regular academic subjects, such as history, geography, arithmetic, are taught in one or another of these foreign languages; as for example, history may be taught in English, French or German. So likewise geography or arithmetic. Physiology or other subjects which have many technical terms are taught in Spanish. The general impression which this school made upon the members of the party was excellent. I wish there might be opened in the United States a large number of schools of similar character.

In this school I heard teachers teaching in English, who showed an almost perfect command of the language, although they had studied only in this school. It was suggested here by some one that a group of teachers including representatives from the Escuela de Lenguas Vivas would like to visit the United States and the Panama Exposition. I mentioned the suggestion to the Minister of Instruction and also to the President of the Republic and they seemed pleased with the idea. Much was said here also relative to the possibility of arranging for the exchange of teachers, particularly of teachers in secondary schools.

On the afternoon of Friday, July 3, in the Museo Social Argentino, a reception was given the party which afforded an excellent opportunity to meet a large number of teachers, professors and other distinguished people. It was interesting to note that in connection with this institution was being carried on at this time the work of preparing for the Argentine exhibit at the Panama Exposition to be held in San Francisco next year. The committee in charge of this work is presided over by Doctor Angel Gallardo. The general secretary of the committee is Mr. Enrique M. Nelson, who is a prominent engineer, and the educational exhibit is under the direction of Doctor Ernesto Nelson, who will have charge of this exhibit at the Exposition. An interesting feature of this exhibit is a collection of some five thousand volumes dealing exclusively with

Argentina, which I understand will remain in this country as a gift from the Argentina Government to some important institution.

I must mention furthermore the after-theater visit which we made to "La Prensa," which is not merely a newspaper; it is an institution. The editing and publishing of the important daily of this name is its primary function, but more than that it provides and furnishes freely to the public legal advice and medical and dental service for which it is well equipped; maintains bureaus of information of different kinds relative to schools, various industries, etc.; conducts a school of music; furnishes rooms for public meetings, lectures, plays, concerts; provides a people's library and reading room, and luxurious apartments for the entertainment of distinguished guests; from its observatory installed on the roof of its splendid building is furnished information about the weather, and by its searchlight is shown the location of fires within the city and news of important events is flashed forth. For its employees it maintains a restaurant, a gymnasium and an emergency hospital. We were conducted by the secretary general, who in the course of our visit very kindly led us to the study of the editor-in-chief, Doctor Adolfo E. Dávila, who welcomed us in a few words of encouragement, pledging his coöperation in the cause which we represented.

In Buenos Aires we had the opportunity also to visit the bureau of immigration, which is under the efficient direction of Doctor Manuel Cigorraga, and to see something of the way Argentina handles the several hundred thousand immigrants who come to her shores annually. The impression made on the members of the party who visited this institution was exceedingly favorable.

Upon arrival at Buenos Aires it was found that travel across the Andes had been suspended. The steamship Orduña was to sail from Montevideo for Punta Arenas of Chile and the West Coast July 5, and it was decided to engage passage on this steamer immediately. This would reduce our stay in Buenos Aires to six days, and a program of eight or nine days was crowded into these six. The experience of these half-dozen days was the most exhaustive I have ever known. Our welcome everywhere was particularly cordial, and the manner in which everything was handled by the committee of the government could not have been more satisfactory.

During the voyage from Montevideo to Punta Arenas and the West Coast we were given opportunity for much needed rest. At Punta Arenas greetings were received from the University of Chile, suggesting what was still before us. The passage through the Straits was particularly interesting. We left the steamship Orduña at Coronel and traveled by train to Concepción and thence to Santiago. Greetings were again received at Concepción from the University of Chile. We arrived at Santiago about 6 p. m., July 15, after an all day ride. The ride from Concepción had been made with an almost uninterrupted range of snowcapped mountains on our right, and as we neared our destination a similar range appeared on our left. An almost unbroken chain of these splendid snow-covered mountains encircled Santiago, giving to this city a setting as unique as beautiful.

The party was met at the station and warmly greeted by Doctor Domingo Amunátegui Solar, Rector of the University of Chile, and various members of the teaching staff; also by Mr. George Thomas Summerlin, secretary of the American legation, and others. The new itinerary which temporary suspension of travel across the Andes caused us to adopt allowed us a little less than three whole days in the capital, and it was found that if we were to undertake to see the institutions and places of special interest that we should see, all this time would be required and more. Doctor Moises Vargas, sub-secretary of instruction, and Doctor Eliodoro Flores, also of the ministry of instruction, had immediate charge of plans for our reception. On the third day of our visit, or July 18, the party was divided, one division giving its time to visiting important educational institutions under the guidance of Mr. Flores and the other division to visiting various other institutions under the guidance of Mr. Vargas.

In the evening a reception was given by the rector and members of his staff at the university, where opportunity was given to meet in an informal way a large company of prominent persons. Great interest was shown in our mission and in the work in general of developing closer intellectual and cultural relations between the people of the republic of Chile and those of the United States.

In Santiago I was particularly impressed with the number of persons who showed special interest in the educational work of the United States and who expressed their desire to come here for purposes of study. Mr. Tancredo Pinochet le-Brun, now director of the school of arts and trades in Santiago, came to the United States a few years ago to prove to the young men of his country, he said, that any one with average ability and a knowledge of English could make his own way in educational institutions here and that it was not necessary for them to look to their government for support while pursuing school work. Mr. Pinochet has just published his experiences in the United States in a volume of four or five hundred pages which has attracted great attention. Speaking of this book, Major Ewing, second commandant of the Military school of Santiago, said that he had secured twenty copies for use of the students of this school.

Mr. Pinochet is the head also of a publishing house which is publishing what is called "la Biblioteca americana de Inspiración." It is his purpose, I understand, to publish under this caption a series of translations of some of the best books published in the United States of this particular type. He expects to visit this country again in December, bringing with him a party of his teachers and advanced students. It is understood also that within the next twelve months probably as many as one hundred persons from Chile will visit this country for one purpose or another.

Chile has been for many years under a powerful German influence. In her schools have been regularly several hundred foreign teachers, most of whom have been Germans. The feeling of the Chileans toward the United States has been thought in general not to be very cordial. I would not venture to say that there is now taking place here a sort of re-action, but I am certain that the people in Chile are to-day as ready to respond favorably to any plan of work looking to closer intellectual and cultural relations or friendly relations on any permanent basis, as any other of the South American states. The suggestion was made here that steps be taken to open in Santiago an institute of much the same character as those proposed a year ago.* I believe such an institute opened in Santiago would meet with almost immediate success.

"These institutes should be founded I think under the simple title: American Institute of . . . (place). Their purpose would be to offer instruction, chiefly if not exclusively informative in character, to the people of the countries in which they are located and to Americans who may temporarily reside in these countries. This instruction would vary according to the peculiar needs and interests of the center in which each institute is located, but in every case should be strictly limited to matters pertaining to the language, thought, and institutions of the United States and of the other country concerned. Each institute would be a bureau of information, and in no small measure also a center of serious study and research. Those in charge should be expected to be able to give reliable information relative to matters pertaining to either of the two countries. Each institute ought to be provided with a good working library and a museum of well selected illustrative material. There would be need also of reading rooms provided with a large assortment of the best magazines and other periodicals of the two countries and a reasonable supply of suitable reference works as well. The social side should be largely emphasized. Provisions should be made for popular lectures as well as for those of a more serious character. Sports should be encouraged and necessary arrangements devised to this end. The aim, moreover, to be kept always in mind would be the encouragement of friendly relations between the two countries, and a spirit of friendliness and goodwill would everywhere pervade the work.

two countries, and a spirit of friendliness and goodwill would everywhere pervade the work. "I believe great emphasis should be placed on the matter of providing in connection with each institute a good library and an educational museum of the first order. In these libraries should be found all books of worth bearing upon American history, government, education, etc., and a large collection of the best works of American literature; and each should contain also all books of worth bearing upon history, government, education, etc., of the country in which it is located and a collection of the best examples of literature of such a country. The museums should contain all kinds of material illustrative of education in the United States and the other country concerned, including samples of work done, charts, text-books, catalogs, bulletins, reports, drawings, photographs, and all sorts of material equipment that may be conveniently displayed there. In time provision should be made, moreover, for a special industrial museum which no doubt would develop naturally out of the industrial section of the educational museum and not lose its educational character and value.

"With regard to the organization and administration of the work here contemplated, there might be erected some sort of advisory board of control composed of a limited number of able and well known men, with headquarters or office in New York. Under it would be a director general to act as the executive agent of the board and have immediate charge of the establishment and administration of the institutes under the control of the board. The director general should be expected to spend half his time traveling, visiting various institutions in the country and in the different countries of Latin America. He should be provided with a competent secretary who would have charge of the office in his absence and carry along the different lines of work which had been initiated. Each institute would be in charge of a local director appointed by this board upon the recommendation of the director general. Provision should also be made for local advisory boards, each composed of a limited number of well known and able men whether belonging to the one or the other nation concerned. The number of instructors, lecturers, and other employees required would depend upon the extent of the work undertaken."

^{*} The following extract from memorandum prepared by the writer and presented on June 11, 1913, will suggest the kind of institution in mind.

In order to enjoy the trip by daylight, other members of the party left Santiago at noon July 19. I remained over for the night train in order to accept an invitation to luncheon with the American Minister, Mr. Henry P. Fletcher, and to talk over the possibilities of work in the interest of closer friendly relations between Chile and the United States. Other guests at this luncheon were Mr. Carlos Castro Ruiz, sub-secretary of foreign relations, and Mr. Moíses Vargas, sub-secretary of public instruction. Mr. Fletcher expressed himself very strongly on the importance of work in this direction, and his willingness to coöperate in the work of carrying out any practicable plans which might be undertaken. Mr. Fletcher is better acquainted with the psychology of the Chilean people than any American whom I have met and he would, I am sure, be glad to be consulted relative to matters pertaining to future development of work in Chile.

Valparaiso is the chief port of Chile, and one of the most important cities on the West Coast. At the time of our visit it was suffering from a series of terrific storms and floods of rain which had done great damage. Our steamer was delayed here one day on account of a storm which caused it to put to sea before all cargo could be taken on board. We visited here the naval academy and a commercial school. In the latter almost the entire equipment was from the United States. The Boy Scout movement has taken a great hold in Chile, and the pupils in the school of commerce in Valparaiso are organized as Boy Scouts. They are provided with headquarters and all equipment in the school.

We arrived in Callao and Lima of Peru on July 27, one day only behind our itinerary. We had hoped to be able to spend several days at this historic capital and possibly make one or two excursions into the interior. Unfortunately, however, it was found that the next boat on which we could take passage from Callao to Panama would not sail until August 6, thus making it necessary for us to decide between spending ten days in Lima or continuing after a single day on the steamship Orduña on which we had arrived.

Lima made the fifth important capital we had visited, besides several other important cities, and it is doubtful if another such group of important municipal centers as these could be found anywhere in the world, where the authorities have been more active recently in city planning and general municipal improvement. From Bahía to Lima each of these important cities was at the time of our visit or had been recently engaged in some gigantic scheme of municipal betterment: enlarging port or other transportation facilities; greatly widening old streets and avenues and opening new ones; planning new city extensions; new systems of sewerage and sanitation; new public buildings of different kinds; new working men's homes are lines of work which have occupied the time and thought in a varying degree of municipal and State authorities recently in all these cities. Some of these schemes are strikingly bold, and to carry them out successfully often requires great courage and diplomacy. Successful work already accomplished is evidence that these qualities are not lacking where required. In Bahía of Brazil and in Lima of Peru nothing has stood in the way of satisfying needs for more adequate and convenient thoroughfares. A man who has the wisdom and the courage that Doctor Joaquín S. de Anchorena, the active and progressive Mayor of Buenos Aires, has shown in accomplishing improvements in that city, excites admiration.

July 28 is Independence Day in Peru and July 29 and 30 are also national holidays. There was considerable excitement and little opportunity in Lima of meeting individual men of distinction. Among the few well-known persons whom we had the pleasure of meeting in the short time that we were there I should mention Doctor Javier Prado y Ugarteche and Doctor Manuel Vicente Villarán. The president, Colonel Oscar R. Benavides, and the minister of instruction, Doctor Luis Julio Menéndez, received us in audience for a few minutes just before going to mass at 10 a. m. July 28.

Doctor Juan Bautista de Lavalle, Peruvian secretary for the Association, met us with others at the boat and was during the whole time particularly active, doing everything possible to enable the party to make the most of its very short stay.

We arrived at Panama on August 2 but were detained in quarantine until the afternoon of August 4. In the meantime we had communicated with the United Fruit Company and were informed that because of the European war the German steamship service had already been suspended and that other services might be suspended at any time. Under these circumstances, it seemed advisable to engage the first available transportation for New York, which was on the steamship Calamares, arriving in New York August 11.

Both in Lima and in Panama, committees had been appointed and programs arranged for our reception, and it is regretted that circumstances were such that it was impossible to accept their courtesies and hospitality, and see more of the people and the institutions of these republics.

It is not possible to mention all the special courtesies shown the party during the trip, but I cannot refrain from naming some of them.

In all places every facility was afforded us that would aid in the accomplishment of our purpose or would contribute to our convenience and comfort. We were made the recipients of books and publications of many kinds, private as well as official, amounting to several hundred volumes. In some places we were given free entry, and in all important ports our entrance through the customs was especially facilitated. Automobiles were furnished for all visits provided for in the regular program in Bahía, Rio de Janeiro, and Montevideo, and on different occasions in other places; from Rio de Janeiro to São Paulo the party enjoyed a private chair car by the courtesy of the Brazilian Government, and from Santiago to Valparaiso again by the courtesy of the Government of Chile. At Callao, the Government of Peru sent launches to bring us from the steamer and again to take us on board. Through the courtesies of Mr. David Stewart Iglehart and others, the launches of W. R. Grace and Company were put at the disposal of the party at nearly all the ports of the West Coast.

But the splendid spirit of hospitality for which the peoples of these countries are well known, is better seen in still other courtesies, some of which must be mentioned. The luncheon given the party by the secretary of state for Bahía has been mentioned. In Rio de Janeiro refreshments were served at most of the institutions that we visited and an elaborate luncheon was served on the last day of our stay in this capital, by the rector and faculty of the National College of Pedro II. In Montevideo, a reception was given the party by the rector of the University, Doctor Claudio Williman, ex-president of the Republic, and the faculty; and by courtesy we visited the race-course, where we were met by the brilliant young Minister of foreign relations, Doctor Baltasar Brum, who was at the time of our visit also acting Minister of instruction; and other prominent young men. Refreshments were served on various occasions in Montevideo

In Buenos Aires, the members of the party were guests of the distinguished Mayor of the city, Doctor Joaquín S. de Anchorena, at the Colon Theatre to see the presentation of "Aïda"; and again of his excellency the President of the Republic to see "Madama Butterfly." The Minister of instruction, Doctor Thomas S. Cullen, gave a luncheon for the party at the famous Jockey Club, where we met a number of the distinguished men of the country; and we were entertained at dinner by the United States Universities Club. At the University of la Plata the rector, Doctor Joaquín V. Gonzales, invited the party to luncheon in the college, and later in the rectory tea was served. The luncheon was served in the regular dining hall of the college and a large number of the professors and students were present. We were guests at tea of Doctor Domingo Amunátegui Solar, rector of the University of Chile in Santiago, and had the opportunity to meet informally there many professors of the university and other prominent men of different callings.

It would be too long to mention the special courtesies shown the director and other individual members of the group, which were intended in most cases for the party and as a tribute to the cause it represented.

One of the very gratifying experiences of the tour was the cordial support received almost everywhere from the American diplomatic and consular representatives in the countries visited. I carried letters of introduction to these representatives which the Honorable William Jennings Bryan, secretary of state, and the Honorable John Barrett, director of the Pan American Union, very kindly furnished me, but this was hardly necessary. Ambassador Edwin V. Morgan in Rio de Janeiro gave the party a luncheon and assisted us personally in different ways to accomplish the objects of our visit. In Montevideo the American minister, Mr. Nicolay A. Grevstad, personally accompanied the party on many of the visits to schools and other institutions. Ambassador Henry P. Fletcher in Santiago, Minister Benton McMillin in Lima and Minister William J. Price in Panama made us the recipients of special courtesies. The deep intelligent interest which some of our representatives showed in the purposes of the Association and their willingness to coöperate in practical plans to develop closer intellectual and cultural relations between the peoples of all the republics of America could not be more encouraging.

From the first to last we were favored by the finest kind of weather, at sea and on land. Although our visit fell in the middle of winter and rainy season in almost all the countries, and there had been torrential rains, the only inconvenience suffered from this was the delay of one day in sailing from Valparaiso because of a severe storm there. During the three days in Montevideo and the six days in Buenos Aires, the weather could not have been finer, although in each case our visit was both preceded and followed by very heavy rains. The temporary suspension of travel across the Andes made it necessary to alter our itinerary, reducing our stay in Buenos Aires by three days and delaying our arrival in Santiago from July 9 to July 16, and in Lima from July 23 to July 27. But coming by the Straits we had a much needed rest, and saw much more of Chile than we could have seen crossing the Andes. Unfortunately, however, our delay in arriving at Lima and absence of satisfactory steamship accommodations made it necessary to limit our visit there to a single day.

The health of members of the party with a single exception remained good through the entire trip. One member was confined to bed during our stay in Montevideo and for the most part of our stay in Buenos Aires; and two or three other members suffered some, but none had to lay up for more than a day. In spite of the fact that we had on every part of the trip excellent accommodations and all necessary conveniences, the trip was a hard one. The demands upon one's time and energy on a trip like this are great, and only persons of experience and unusual strength and ability to conserve it can stand the strain of meeting such demands satisfactorily. With the knowledge and the experience gained by this trip, however, another could be made easier in this respect, and at the same time the measure of its successful accomplishment could be increased.

The tour covered in all only a little more than ten weeks or, to be exact, seventy-three days; the distance traveled aggregated some seventeen thousand miles; and we visited ten different cities, not counting half as many more places where we stopped for a few hours only. The time spent in each of these ten cities varied from one to six days, no more. Naturally there was little or no time for study or research, and it was not expected. The principal aim was that the party—as a party—make favorable impressions everywhere and prepare the way for future work, and that the members of the party gain good impressions which would aid them to interpret properly in the future whatever they may hear or read concerning these countries or their people. It is certain that all members brought back with them a more adequate conception of the countries visited and of their people than they could have received in any other way, and that the general impressions on both sides were good.

But the tour was not without certain important results of a more concrete character. Not all the concrete material was collected that some of the plans anticipated, but no inconsiderable amount of valuable data and information was gathered in one form or another; a large amount of important material for study and reference was collected; many important relationships were established through personal contact, and many personal acquaintances were formed. The character, aims and purposes of the Association were made known in a degree that could hardly have been accomplished in any other way. The daily journals everywhere were sympathetic, and devoted considerable space in their columns to informing the public not only of our movements from day to day, but also of the character of the Association which we represented and of the nature of our mission. Many of the more important dailies expressed special interest in the work for the development of closer intellectual and cultural relations between the countries of America and their desire to coöperate with the Association in this work in every practicable way.

In every case, however, the real value of the accomplishments of the tour will depend—for the most part—upon the use the individuals and institutions interested make of them. It was our especial aim to make all those with whom we had the pleasure of coming in contact feel that we, as individuals, as well as the institutions which we respectively represented, would be ready and glad at all times to serve them in whatever way we might be useful. No doubt was left in our minds of their willingness to respond gladly, within the limits of their power, to any demand we might see fit to make upon them. But here as everywhere will be met the difficulty of lack of common knowledge and experience, and unless the threads of common interest are gathered together immediately and woven into some mutual bond, this golden opportunity for mutual service may pass without profit to anyone.

As has been indicated elsewhere, the individual members of the party making this tour, represented each some one or more institutions to which they will no doubt report respectively, pointing out the special opportunities open to these institutions.* But the opportunities of this Association under whose auspices this tour has been made, which the experience and knowledge gained on this trip serve to define and to make more clear, if not wholly to disclose, are of very special importance. It is believed that the work of development of closer intellectual and cultural relations between the United States and these other American

^{*} Mr. William Thomas Morrey is preparing a report which he will submit to the Board of Education, New York City, soon, and which he expects will be published.

republics could not have been begun at a more opportune time, and that the chief value of this tour lies in the light which it serves to throw upon this work.

Nothing perhaps could have served quite so well to bring out the importance of work at this particular time looking to the development of closer relations of an intellectual and cultural character between our people and the people of these other republics or to prepare the way for successful work of this kind as has this visit which the wisdom and generosity of the Endowment made possible. If this need existed in the past, more now. Owing to the present unfortunate conditions in Europe, these republics of America are practically cut off from these important nations with which their political and commercial relations, as well as their intellectual and cultural relations, have been closest. More then, perhaps, from necessity than from choice, will their political and commercial relations with us become closer day by day.

If these relations are to be free from needless friction and vexatious misunderstandings, and close friendly relations with these countries are to be maintained and strengthened, the more rapid development of closer relations of an intellectual and cultural character with them is really imperative, and in this work the interest of all institutions of culture and learning in the United States and in those countries should be enlisted and their effective coöperation secured. This Association is in a position to do more in this particular direction than any other, and in the main the responsibility rests with it to inspire, to initiate, to organize and in a measure to direct such work. There are many lines along which such work could be carried on to advantage and some of these merit more special consideration here.

Under the sanction of the Endowment the Association has already declared its purpose to carry on work along the general lines here in mind. It has declared itself ready to undertake "to collect and to distribute reliable information for the guidance and assistance of persons interested in the social and intellectual life and institutions of the different American republics," also "to collect and furnish freely appropriate and exact information for the guidance and assistance of persons who may wish to come from other American republics to the United States or to go from the United States to one or more of these republics for the purpose of travel or of study."

There is imperative need of work such as is here contemplated. The amount of reliable information available in the other republics of America relative to the social and intellectual life and institutions of the United States is very limited, and the amount of similar information available here relative to the social and intellectual life and institutions of these republics is no less limited. Much of the information needed already exists in this country in sufficiently convenient form to be of use to the people of the other republics, and it remains only to search it out, collect it together and to provide adequate means of distribution to points in other republics where it is most needed. The same is true only in a less degree of similar information in the other republics.

Much important information is needed, however, of which the above is not true. It is necessary that the work of collecting such information, of arranging and publishing it in appropriate form and of distributing it wherever proper use can be made of it, should go on as rapidly as possible. A small beginning has already been made. The bulletin on Educational Institutions in the United States, published by the Pan American Division of the Association a few months since, and others in preparation which have been announced, suggest the kind of information I have in mind. It is believed, then, that if the Association is to accomplish this work in a wholly satisfactory manner and to attain the objects which it has already undertaken to accomplish, it must be more than a center of information, it must become also in some measure a center of serious study and research.

It will be necessary to keep in mind, furthermore, that the demand for information is not yet in all respects as great as it should be. The general ignorance relative to the social and intellectual life and institutions of the other republics which exists in our own country is so great in general that no intelligent interest in them is possible; and the same is true in no less degree in other republics relative to the intellectual and social life and institutions of the United States. There is need that steps be taken which will tend to awaken in different parts a more intelligent interest and thus to produce demands for the kind of information that would be of special value to the people of such places. There is a double function to perform, to meet such demands as exist, and to create demands where they should exist and do not, by effective propaganda of a more or less aggressive character.

It is believed that the Association or some other appropriate institution under its special patronage should become the depository for all kinds of material relative to the social and intellectual life and institutions of all the American republics. The catalogues and other publications of some five hundred of the leading educational institutions of the United States have already been collected; also a considerable number of the best recent books on South America and various individual republics have been provided; and various collections of books and other publications, which were received from the governments and private individuals in several of the countries visited by the party, have been added. This is a beginning, but only a beginning. The same institution should be a depository also for all sorts of illustrative material, an educational museum as it were.

Mention has been made of the plan of the Argentine Republic to exhibit at the Panama Exposition next year a collection of some 5,000 volumes of valuable books and other publications relative to the intellectual and social life and institutions of that country and the intention of that government to leave this collection in the United States. It is probable that other republics will have similar collections. It is certain that there will be many important educational exhibits from practically all of the republics at this exposition. It is believed that a study should be made of these collections and every proper effort made to have such of them as suit the needs of the Association deposited with it.

In the countries visited the book trade is largely in the hands of foreigners. English, French, Germans, Italian and Spanish. The stock carried is apparently determined, in the main, according to the nationality of the proprietor. Comparatively few books, magazines or other publications of the United States are found. If a book published here is wanted in these countries the person must send direct to the publisher for it, and the experience of some who have tried this has not been very satisfactory.* Some appropriate steps should be taken to induce our leading publishers to arrange for joint agencies in many of the important centers of the principal countries. It is believed that almost from the beginning this would pay and it would be a step which would be much appreciated by a growing number of those who are interested in our publications. There is need of first-class American bookstores in such important cities as Rio de Janeiro, Montevideo, Buenos Aires, and Santiago, for example.

I have had in mind here merely the sale and distribution of publications which are already regularly issued from the press of our publishing houses. But something should be said of the need of new books yet to be prepared and published, such as ordinary text-books, supplementary readers, reference books, in the Spanish and Portuguese languages. These are particularly needed in the United States, and properly prepared or edited would find a large sale also in other republics, and perhaps in Europe. The need of abridged editions of some of the best literature of the different republics is already being felt and is sure to grow. These books should be edited in Spanish or in Portuguese, according to the language of the text, but by some competent person who is able to appreciate the difficulties of an English-speaking child in reading these languages.

DR. Caseros Buenos Aires.

DEAR SIR:--We have on hand copies of LINCOLN, THE MAN OF THE PEOPLE and GEORGE WASHINGTON, which were ordered by you. We have been trying to send these books to you by mail but the Post Office refuses to accept this package as they have no station at Caseros. Will you kindly let us know at which of the following stations you can call to get this package:

Rio de Janeiro, São Paulo, Bello Horizonte, Bahía, Pernambuco (Recife) and Para. We now ask that you write the postal authorities at the nearest of the above stations and make arrangements to have the books forwarded from that place to you, writing us and informing us where to ship. Kindly give this your immediate attention.

Yours very truly,

(Claim Dept.)"

^{*} The following addressed by the Claim Department of an important publishing house in New York City to a distinguished gentleman in Buenos Aires is suggestive of what I mean: it speaks for itself.

NEW YORK CITY, June 5, 1914.

There is need also of a good unilingual Spanish dictionary which will contain the several thousand words in common usage by the Spanish-speaking people of America and not found in dictionaries now available.

Thousands of valuable official publications of different kinds, municipal, state and national, come from the press each year in this country which should have a growing circle of readers in many of the other republics. Arrangements could be made, it is believed, for appropriate convenient depositories for these publications in the capitals at least of all these states. Similarly, appropriate depositories should be arranged for in different parts of the United States for like publications from the other republics. Only a few of these official publications now reach those who would be most interested in them, either in the United States or in the other countries. It is believed that with a little effort and time, satisfactory arrangements could be made for systematic exchanges of such publications to the great advantage of all.

American magazines and reviews should have much wider circulation in these republics than they now have, as also should the more important reviews and other periodic publications of these states have wider circulation here. A number of inquiries were received relative to the possibilities of exchanges. This ought to be possible in many cases, and merits consideration. The Association should receive regularly all the best magazines and reviews published in the different republics, and it is suggested that arrangements be made to this effect through satisfactory exchanges. Some of our best magazines and reviews could be subscribed for and be sent in exchange for periodicals published in other republics which the Association would wish to receive. The expense of an arrangement of this kind would not be great, and properly managed would be certain of good results.

The Association has also expressed its purpose to encourage the voluntary interchange of students, instructors and professors of educational institutions in the United States and of similar institutions in other republics of America.

Students have been coming from some of the other republics to the United States for a good many years; it is not known just how many but the number is not as large as it should be. Comparatively few students have come from these important republics of the far south to study in our institutions. The number should be greatly increased. It is only very recently that our educational institutions have in general shown any special willingness to encourage foreign students to come to them; and even yet comparatively little is done by them to make known in other countries the opportunities which they offer. I think not a single institution in the United States offers important courses intended primarily for foreign students. Perhaps in no other important nation has so little been done to attract students from other countries to its universities and other educational and cultural institutions.

Almost no students from the United States have gone to any of the other republics for purposes of study. In general, very little is known of the opportunity for special study and research offered to advanced students in the more progressive of these countries. Something should be done to make more widely known the special opportunities of this kind in centers like Rio de Janeiro, Montevideo, Buenos Aires, Santiago, Lima and others; and more should be done to encourage some of our graduate students to take advantage of these opportunities. The mere experience of living the life of a student in some of these important centers of culture and learning would be worth the cost to many of our young men who are interested in the social and intellectual life and institutions of these countries. There is a growing need also in this country of able young men who have profited by this experience. In order to encourage a movement in this direction it is believed that some of our principal universities might be induced to provide for one or more traveling fellowships. It is suggested also that this Association make provision for one or two such fellowships. Students holding these fellowships could be at the same time of great service to the Association.

Systems of interchange of teachers with some of the European countries have been in successful operation for a number of years. Everywhere was interest shown in the purpose of the Association to encourage a system of interchange of teachers of educational institutions in the United States and in similar institutions in other republics of America. Secondary schools will offer the best opportunity in this direction, and the interchange of teachers of many of these schools is entirely feasible. There is need only of some person or institution to prepare and to propose some satisfactory plan, which should not be difficult. Reference has been made to the school of modern languages in Buenos Aires. It is believed that any plan looking to the interchange of teachers in one of our best secondary schools and teachers of this school of modern languages, for example, would be favorably considered by the authorities there.

There are various serious difficulties in the way of interchange of university professors, which cannot be overcome immediately. In exceptional cases, however, satisfactory arrangements might, no doubt, be made.

Something should be said here of the growing demand in many of the other republics for specialists in almost all lines, including education. This demand has been met for the most part in the past by the different nations of Europe, but in recent years there appears to be a tendency to look to the United States to help meet this demand. Already there is hardly one of these republics which has not in its service one or more American specialists. Only a few months ago this Division was asked to aid in securing as many as sixteen trained teachers for service in one of these countries. While there is no interchange involved in this, from every point of view it should be encouraged just as effectively.

The United States is, perhaps, the only one of the American republics where adequate provisions are made for the training of specialists. In this country great progress has been made in this direction during these later years. Our best institutions are training specialists in many lines, and can provide wellequipped men in almost any special field. Unfortunately, however, little is as yet being done to train specialists for foreign service. It is exceedingly important that we should begin doing this as soon as possible.

It is only a matter of a short time, I believe, when specialists in educational administration will be required in not a few of the other republics in considerable numbers. Only in the United States are men especially trained for this work; but we should go further and prepare specialists in educational administration, as in all other lines, for service in foreign countries, and be ready to meet whatever demands in this direction any of the other republics may be pleased to make upon us. No one can justly feel himself qualified for service in a country who does not possess a reasonable knowledge of its language and of its laws, of its social customs and of the peculiar psychology of its people, however well equipped he may be in his chosen specialty. There is abundant collective experience already supporting this statement.

Not a little has been already accomplished in the way of encouraging international visits. The visit of Mr. Robert Bacon last year to the principal countries of South America was everywhere favorably mentioned; and it is doubtful if anything more could have been done at this time to open the way to successful work in the development of closer intellectual and cultural relations with these countries, than the visit of this group of university men. Such visits as those of Mr. Elihu Root and of Colonel Theodore Roosevelt are cordially welcomed and do great good. Much good may be accomplished also by visits of less distinguished men than these. But more should be done to encourage visits of men of different ranks and callings from these republics to this country and to enable all concerned to get the most from such visits. These have been too few in the past. Mention has been made of prominent persons from some of these republics who will visit this country within the next twelve months. Necessary steps should be taken as soon as possible to arrange for the proper reception of these persons and to facilitate in every way the accomplishment of their purposes.

In general it is believed that more good will be accomplished from every point of view by providing properly for visitors who come to us from the other republics of their own initiative or on some official mission, than by undertaking to invite large parties from these countries to make visits here as guests of the Association, as has been contemplated. By special arrangements with local authorities or committees in different parts of the country where visits are contemplated, it will be possible, I am sure, to secure the most satisfactory kind of reception and every facility needed in order to accomplish in the most satisfactory manner the particular objects in view. Something more should be said relative to such visits as this of university men. Notwithstanding what has already been said of the good which this visit has accomplished, it is believed that such visits should be the exception. In general, more would be accomplished by visits of individuals or small groups of three or four persons of similar interests. If large parties make such visits they should be made up of these smaller groups, and schools of medicine, of law, and of applied sciences should be represented. Plans should be made well in advance, and if possible more or less definite programs of special visits in each place should be prepared beforehand. It is believed also that each group should have a more or less well-defined purpose to which it should be the aim to devote a portion of the time.

Moreover, the Association has declared its purpose to encourage a wider study of the Spanish and Portuguese languages in the United States and of the English language in the other republics. This, in general, is fundamental. One of the greatest needs is of a common language. Our educational institutions are doing almost nothing at all for the study of Portuguese, although it is the official language of one of the most important of the American republics and one with which our relations must under normal conditions certainly become closer day by day; and for the study of Spanish, which is the official language of eighteen of these republics, only a little more. In general, relatively more is being done for the study of the English language, in the more important of the other republics at least, than we are doing for the study of either Portuguese or Spanish in the United States.

When we consider the growing importance of the other republics of America, and of our relations with them, it is difficult to understand why adequate provisions for teaching their official languages in our schools, colleges and universities have been so far neglected. Greek, Latin, German and French are in the United States almost everywhere given preference, and in some cases also even languages of much less importance than these. I doubt if any other language, ancient or modern, will have an importance for the majority of the students of the coming generation comparable to that of Spanish, if taught as the official language of these eighteen growing American states as well as of Spain. The educated American of the next generation should be taught to speak English and Spanish or Portuguese with almost equal facility.

Here is a most important field for work. It is believed that something in the way of an active propaganda should be undertaken in favor of better provisions for the study of these languages in all our educational institutions, that every proper influence should be brought to bear to have them placed in every way on a par with other foreign languages; and that adequate provision for the special training of teachers of these languages should be especially encouraged. The teachers of Spanish and Portuguese now in service should be encouraged to organize, and to exercise every effort to raise the standard of the teaching of these languages and to make all instruction in them of as high grade as that in any other language; and by preparing high-grade supplementary reading books and other text-books in the language to improve the methods and to relate the instruction closely with the respective peoples of America who speak them. Something might be done also to encourage the opening of schools modeled after the Escuela de Lenguas Vivas in Buenos Aires, which has already been described.

The work implied in the purpose of the Association to encourage more ample provisions in the colleges and universities of the United States and in the other republics for instruction in the intellectual and social life and institutions of the respective nations is work which merits attention. The need of more ample provisions for the teaching of the official languages of the United States, of Brazil, and of the Spanish-speaking republics is very great. The special need of adequate provisions for the professional training of teachers and the special training of leaders and specialists in every line is also great. But, furthermore, the history, literature, law and government of at least the more important of all these republics should be given much more attention than is given at present. Brazil with a government of more or less loosely federated states; Argentina with a system of states more or less closely federated and various important territorial governments; Chile with a system of government highly centralized and Peru with a government also highly centralized, offer important illustrative material in the study of administrative law such as can be found nowhere else. The importance of satisfactory instruction in the geography, history of early civilization and of Spanish colonization in all America should be encouraged in every practicable way. It is certain that these countries would welcome and coöperate in any practical plan looking to improvements in these directions.

It is the purpose of the Association to encourage and to facilitate the opening of special institutes which would be, as it were, local agents of the Association for the carrying on of all the kinds of work undertaken where such institutes are opened. Suggestions have been made relative to the need of some permanent efficient local organization or institution in some or all of the capitals visited. It is clear that the local atmosphere and local needs must be considered in determining just the kind of organization or institution that should be provided in each case. But the essential elements in every case are efficiency and permanency. There would be little excuse for an institution which was not efficient, and any institution would need to have the element of permanency before any high degree of efficiency could be expected.

The secretariats opened in Brazil, Argentina and Peru have elements of permanency, but they are not as yet adequately prepared for efficient work. Through the aid of a competent person who would know the psychology of the Brazilian people and also understand the aims and purposes of the Association, the secretary in Rio de Janeiro could develop, it is believed, a suitable organization for the work there. In any case the appointment of a man there, as already suggested, to study the situation would seem to be the proper next step. In Montevideo it is suggested that something might be done by coöperating with the World's Student Federation there. In Buenos Aires it is believed that arrangements similar to those suggested for Rio de Janeiro should be tried and the practicability of coöperating with the Museo Social Argentino in accordance with some well-defined plan be seriously considered. There is no secretary in Chile, and it is believed that if the Association would undertake to establish an Institute such as has been elsewhere suggested,* Santiago would be an excellent place to try it out and also this a very opportune time. In Lima, Mr. John Vavasour Noel, president of the West Coast Publishing Company, is doing work which merits encouragement. The secretary for the Association in Lima, Doctor Juan Bautista de Lavalle, is particularly competent and will coöperate effectively in any work undertaken there. It is suggested further that steps be taken to start work in Mexico and perhaps also in some of the Central and other South American States.

The organization of a Pan American Institute under the auspices of this Association forms part of the program of work for the development of closer intellectual and cultural relations between the peoples of the United States and of the other republics of America which the Endowment authorized in its resolution of December 20 of last year. The organization of such an institute would seem to be an important step in advance at this time. The need of such an institution as is here contemplated is already keenly felt and will be felt even more before it can be completely organized and ready for the satisfactory discharge of its proper functions. The work which I have indicated is in a great part the work of an institution rather than of an office merely, notwithstanding the good work which an office may be able to do along practically all the lines suggested.

With regard to the matter of coöperating with other institutions and organizations, something has already been done and almost all the suggestions which have here been made imply effective coöperation with all important educational institutions everywhere and other organizations interested in the social and intellectual life and institutions of the different American republics. Opportunities should be sought out further, it is believed, to exercise some influence with those who fill positions of responsibility affecting our relations with the other republics, and to search out some practical way in which to coöperate to determine and to select the right kind of men for such positions.

^{*} See page 15.

I cannot conclude this report without a brief reference to the changing position of America with respect to the rest of the world. Relations between the different American republics until now have been very largely local in character; other nations of the world have taken no great interest in them, and they have not affected the world at large. The ruling American policies and traditions, together with the geographical isolation of all the American republics, have given to international relations in America a quite subordinate place. But the opening of the Panama Canal, the gradual awakening in the far east and the disastrous effects which must inevitably follow the terrible conflict now raging in Europe tend to alter greatly the position of the nations of America in their relations to the world at large. The domestic or local character of American international relations is destined gradually-perhaps rapidly-to become less pronounced. Every important act of the different American republics, whether of a national or of an international character, must have in the future an increasing interest to other nations of the world. These republics will be affected more and more by world movements, and their individual and collective responsibilities with respect to world civilization will be greatly increased.

Under these circumstances the need of a better understanding between the peoples of these republics must grow rapidly. This better understanding is possible through that ever-widening fund of common knowledge and experience necessary to those intimate relations of an intellectual or cultural character which form the only permanent basis of friendly international relations. Under these conditions, the accomplishment of such work as is here suggested becomes increasingly vital and necessary.

HARRY ERWIN BARD

New York, October 6, 1914

APPENDIX I

Itinerary of the Party of University Men Making the Tour of the Principal Capitals of South America

May 30—SaturdayLeft New York 1 p. m. June 5—FridayArrived Barbadoes 9 a. m.
June 13—Saturday Arrived Bahía 9 a. m. Left Bahía 8 p. m.
June 16—Tuesday Arrived Rio de Janeiro 9 a. m. June 21—Sunday Left Rio de Janeiro 7 a. m. Arrived São Paulo 7 p. m.
June 23—Tuesday Left São Paulo 8 a.m. Arrived Santos 12 noon.
Left Santos 2 p. m. June 26—Friday Arrived Montevideo 9 a. m.
June 28—Sunday Left Montevideo 10 p. m.
June 20-Monday
July 4-Saturday Left Buenos Aires 10 p. m.
July 10-FridayArrived Punta Arenas II a. m.
Left Punta Arenas 4 p. m.
July 14-Tuesday Arrived Coronel 11 a. m.
July 15-Wednesday Left Coronel 8 a. m.
Anning Conception to a m
July 16—Thursday Left Concepción 7 a. m.
Arrived Santiago 7 p. m.
July 19-SundayLeft Santiago 12 noon.
July 19-Sullday
Arrived Valparaiso 6 p. m. July 21-TuesdayLeft Valparaiso 2 p. m.*
July 21-Iuesday Arrived Antoforasta 8 a.m.
July 24—Friday Arrived Antofagasta 8 a. m.
Left Antofagasta 4 p. m.
July 25-Saturday Arrived Iquique 8 a. m.
Left Iquique 11 a. m. July 26—Sunday Arrived Mollendo 9 a. m.
July 26-Sunday Arrived Mollendo 9 a. m.
Left Mollendo 11 a. m.
July 27-Monday Arrive Callao (Lima) 4 p. m.
July 28-Tuesday Left Callao (Lima) 3 p. m.
Aug. 2-Sunday Arrived off Panama 11 p. m.,
ship quarantined until
August 4, 4 p. m.
Aug. 4-Tuesday Arrived Panama 5 p. m.
Aug. 5-Wednesday Left Panama 7 a. m.
Arrived Colon 1 p. m.
Left Colon 3 p. m.
Aug. 11—Tuesday Arrived New York 9 a. m.**

^{*} Ship delayed 24 hours on account of storm. ** Short stops made at other ports, but members of party went ashore only at ports mentioned.

APPENDIX II

Personnel of the Party of University Men Making the Tour of the Principal Capitals of South America

BARD, HARRY ERWIN.

HARRY ERWIN.
A. B. and Honorary A. M. Wabash College; A. M. and Ph. D. Columbia University; Master's and Doctor's Diploma in Education Administration Teachers College of Columbia University. Taught Latin in Wabash College and Greek and Latin in Adams Collegiate Institute of Adams, New York; Principal of Adams Collegiate Institute: Divison Superintendent of Schools in the Philippine Islands; Official Adviser of the Ministry of Instruction of Peru and Secretary-member of a special commission to prepare an Organic School Law. Has published various studies in education administration; member of learned and civic societies. Director of the Pan American Division of the American Association for Interna-

Director of the Pan American Division of the American Association for Interna-tional Conciliation, 407 West 117th Street, New York City.

BURNET, PERCY BENTLEY.

B. L. and M. A. University of Indiana; sometime student in the university of Paris, Leipzig, Chicago and Nebraska.
 Has taught, German at Oberlin College and at the University of Indiana; German, Gothic, and Hebrew at the University of Chicago; French and Spanish at the University of Indianapolis; French, Spanish and German at Grinnell, Iowa.
 Has published, French Dictionary (Edgren and Burnet); Spanish Grammar;
 Spanish Text, La Familia de Alvareda.
 Is now and has been for past eight years head of foreign ianguage department of the Manual Training School, Kansas City, Missouri.

FITZ-GERALD, JOHN DRISCOLL, II.

GERALD, JOHN DRISCOLL, II.
 A. B. and Ph. D. Columbia University; University Scholar and University Feliow in Romance Languages; sometime student in Universities of Paris, Berlin, Leipzig, and Madrid; Elève Titulaire and Elève Diplômé de l'Ecole Pratique des Hautes Etudes (Section des Sciences Historiques et Philologiques) Paris.
 Member of Hispanic Society of America: Corresponding Member of the Real Acade-mia Españoia de la Lengua; Corresponding Member of the Spanish-American Athenæum; Corresponding Member of the Comité de Patronage des Etudiants Etranges de l'Uni-versité de Bordeaux.
 Has published, Versification of the Cuaderna Via as found in Berceo's Vida de Santo Domingo de Silos; Rambles in Spain. Edited, La Vida de Santo Domingo de Silos, por Gonzalo de Berceo: Lope de Vega; Novelas á la Señora Marcia Leonarda. Con-tributed to encyclopædias and reviews; Associate Editor Romantic Review.
 Has taught Spanish in Columbia University and is now Assistant Professor of Romance Languages at the University of Illinois, Urbana, Illinois.

GOODELL, REGINALD R.

B. A. and M. A. Bowdoin College: sometime student at Johns Hopkins University and in the universities of Paris and of Granada; studied under Professor A. Rambeau, and with Professor Paul Passy in Paris. Taught for two years in the University of Maine; one year in Bowdoin College; two years at the Massachusetts Institute of Technology. Is now and has been since its opening, head—except for the first year—of the De-partment of Romance Languages, Simmons College, Boston, Mass.

JONES, CHESTER LLOYD.

CHESTER LLOYD.
 B. L. University of Wisconsin; Ph. D. University of Pennsylvania; sometime student in universities of Berlin and of Madrid.
 Has published. The Consular Service of the United States; The Coal Carrying Canais of the United States; Parties and Elections; Statute Law Making; Wage Payment Legislation in the United States (joint author with R. G. Patterson); Member of various civic and learned societies.
 Was Instructor in the University of Pennsylvania. 1905-1909; is now and has been since 1910 associate professor of Political Science, University of Wisconsin, Madison, Wisconsin.

LOCKEY, JOSEPH BYRNE.

B. S. George Peabody College for Teachers, Nashville, Tenn.; M. A. Columbia University: Master's Diploma in Education Administration Teachers College of Columbia University; sometime student in the University of Chicago.
 Has specialized in education administration; was for a number of years Principal of High School in Pensacola, Fla.; Departmental Inspector of Primary Instruction in Lima, Peru.

Peru. Has pubilshed, Educational Needs in Fiorida; La Enseñanza de la Aritmética; Juegos al Aire Libre; Estudios sobre la Instrucción Primaria.

LUQUIENS, FREDERICK BLISS.

B. A. and Ph. D. Yale University; sometime student in France and in Spain as Scott Hurtt Fellow of Yale University. Was instructor in French and Spanish in the Sheffield Scientific School of Yale Uni-

was instructor in French and Spanish in the Sheffield Scientific School of Yale Uni-versity, and later assistant professor in Spanish. Has published several articles on medieval French and Spanish among which are, An Introduction to old French Phonology and Morphology; Three Lays of Marie de France retoid in English Verse. Is now Professor of Spanish in the Sheffield Scientific School of Yale University, New Haven, Connecticut.

MARSHALL, LEON CARROLL.

HALL, LEON CARROLL.
A. B. Ohlo Wesleyan University; A. B. and A. M. Harvard University; Henry Lee
Fellow in Economics, Harvard University.
Has taught Economics in Ohlo Wesleyan University and Political Economy at the
University of Chicago.
Has published, Outlines of Economics; Bibliography of Economics; Materials for
the Study of Elementary Economics; various magazine articles. Member of various
learned socicties. Associate Editor of the Journal of Political Economy.
Is now Professor of Political Economy and Dean of the College of Commerce and Administration, University of Chicago, Chicago, Illinois.

MORREY, WILLIAM THOMAS.

A. B. Ohlo State University; A. M. New York University; sometime student in Columbia University.
Has taught in high schools of Columbus, Ohio, and in Bushwick High School of Brooklyn, New York. President of High School Teachers' Association of New York, and member of various clubs and other organizations.
Has published, Accredited High Schools and State Universities; Heath's Physiography (joint author); Laboratory Work in Physiography.
Is now Head of the Department of History and in charge of Annex, Bushwick High School, Brooklyn, New York.

PERSINGER, CLARK EDMUND.

B. A. Cornell College; M. A. University of Nebraska; sometime student in History and Politics at Johns Hopkins University; Fellow in American History in University of

Instructor; Adjunct Professor; Associate Professor; and Professor of American History in the University of Nebraska. Has published, Political Philosophy of Thomas Palne; Letters from New America; A Primer of Socialism; is joint author of Caldwell's and Persinger's Source History of the United States. Is now Professor of History of the Versentia

Is now Professor of History at the University of Nebraska, Lincoin, Neb.

SNIDER, GUY EDWARD.

B. L. University of Wisconsin; M. A. University of Missouri; Ph. D. Columbia University; for three years undergraduate student in Grinnell College. Is now Instructor in History and Economics, College of the City of New York, New York.

WILLETT, ALLAN H.

A. B. and A. M. Brown University; Ph. D. Columbia University. Has taught Economics in Brown University. Is now Professor of Economics and Commerce, and Head of the Department of Commercial Engineering, Carnegie Institute of Technology, Pittsburgh, Pennsylvania.

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